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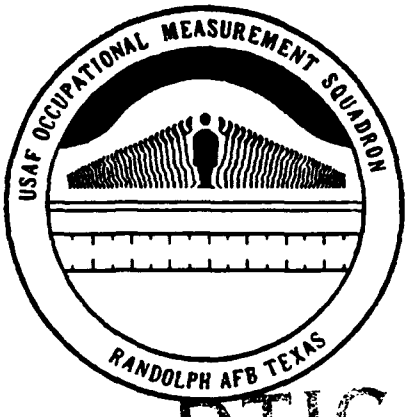

OCCUPATIONAL SURVEY REPORT

WEATHER CAREER LADDER

AFSC 251X0

AFPT 90-251-87A

JUNE 1992

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT SQUADRON
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150-5000

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	OSR	ANL EXT	TNG EXT	JOB INV
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AFMPC/DPMRAD5	1			
AL/HRD/HRMM	2	1m	1m	1
AL/HRT/DOS	1	1m	1m/1h	1
ARMY OCCUPATIONAL SURVEY BRANCH	1			
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HQ USAFE/DOW (Unit 3050, Box 15, Ramstein AS GM)	3		3	
NODAC	1			
Standards Division (MAGTEC)	1			
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USAFOMS/OMYXL	10	2m	5	10
5 WS/CC (Bldg 168, Ft McPherson GA)	3		3	
3330 TCHTW/TTO (CHANUTE AFB IL)	4	2ea	4ea	4
3330 TCHTW/TTS (CHANUTE AFB IL)	1		1	

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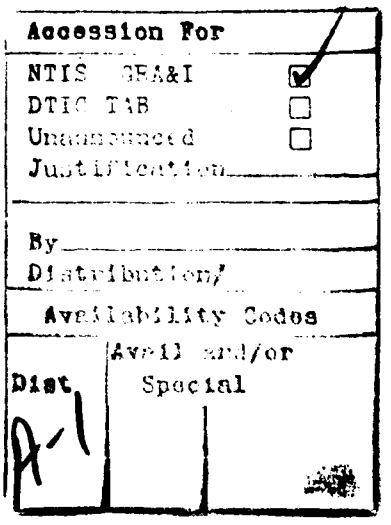

PREFACE

This report presents the results of an Air Force Occupational Survey of the Weather (AFSC 251X0/A) career ladder. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials.

Mr Tom Duffy developed the survey instrument, Master Sergeant Cornelia J. Wharton provided computer programming support, and Ms Raquel A. Soliz provided administrative support. Mr Daniel E. Dreher analyzed the data and wrote the final report. Lieutenant Colonel Johnny M. Collins, Chief, Airman Analysis Section, Occupational Analysis Flight, USAF Occupational Measurement Squadron, reviewed and approved this report for release.

Copies of this report are distributed to Air Staff sections and other interested training and management personnel. Additional copies may be requested from the Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Flight (OMY), Randolph AFB, Texas 78150-5000.

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SUMMARY OF RESULTS

1. Survey Coverage: This report is based on data collected from 1,683 AFSC 251X0 respondents: 648 Observers, 972 Forecasters, 41 9-skill level members, and 22 CEM code personnel. This represents 55 percent of the total assigned population.

2. Career Ladder Structure: Survey data show a uniquely diverse and highly technical career ladder structure, with Observer and Forecaster as the 2 major jobs, 5 clusters of jobs performed by smaller numbers of respondents, and 12 independent technical jobs distinguished by the time spent performing specific technical tasks. This structure is consistent with the present classification structure described in AFR 39-1 Specialty Descriptions.

3. Career Ladder Progression: Weather personnel progress from performing weather observing functions during their first enlistment (3- and 5-skill level) to more analytical forecasting and supervisory functions at the 7-skill level. Nine-skill level and CEM personnel perform both supervisory and career ladder management tasks.

4. Specialty Descriptions: AFR 39-1 Specialty Descriptions accurately describe functions and tasks performed by all AFSC 251X0 personnel.

5. Training Analysis: Most of the STS and POIs are well supported by survey data. There are some STS line items and learning objectives in the 3-skill level course which need to be reviewed, along with several tasks not matched to the training documents.

6. Job Satisfaction: Overall satisfaction of Weather personnel is similar to that of members of related specialties surveyed in 1991 and to satisfaction reported in the previous survey. Additionally, survey data indicate Forecaster personnel enjoy their work more and feel their talents and training are better used than Observer personnel.

7. Discussion: The Weather career ladder has remained fairly stable since the last Occupational Survey Report (OSR) in 1988. Although new equipment is being acquired, overall jobs being performed are essentially unchanged. Career ladder progression is from technical observer functions to more complex analytical forecasting and supervisory functions performed by 7-skill level personnel. Training documents and current courses are generally supported using standard ATC criteria. Forecaster personnel report higher job satisfaction indicators than Observer personnel.

OCCUPATIONAL SURVEY REPORT
WEATHER CAREER LADDER
(AFSC 251X0/A)

INTRODUCTION

This is a report of an occupational survey of the Weather career ladder (AFSC 251X0/A) requested by HQ Air Weather Service (AWS/DOT). The purpose of the study was to validate the Plans of Instruction for the new qualification course, the 3-skill level awarding course, and the advanced Forecaster course. In addition, survey data were also used to review the current STS and AFR 39-1 Specialty Descriptions and to capture the use of new equipment. The last survey was conducted in 1988.

The Automated Weather Distribution System (AWDS) and next generation weather radar system (WSR-88D) are recent developments and are just beginning to be used. The specialty is transitioning to the new equipment as it is delivered, but at the time of the survey, only a few East Coast bases had the AWDS system on line, and the WSR-88D system was not in place. Data were collected, however, to determine how many members of the specialty were actually using the new equipment.

Background

The AFR 39-1 Specialty Descriptions state that 3- and 5-skill level AFSC 251X0 personnel observe, record, and distribute weather information. They also operate meteorological equipment, plot weather data on charts and diagrams, analyze weather data, and provide forecasts. Seven-skill level personnel have a more complex job which includes presenting briefings; analyzing, observing, recording, and distributing weather information; forecasting; operating weather radar; and providing weather support to commanders and staff agencies. Nine-skill and CEM code weather personnel are the managers and superintendents of the career ladder.

Weather personnel enter the career ladder by completing the newly developed AQR25130, Weather Observer Course followed by the 3-skill level awarding ABR25130, Weather Specialist Course. Both courses are currently taught at Chanute AFB. The curriculum of the first course includes general weather topics of sky conditions, atmospheric phenomena, temperature, wind, pressure, types of observations, surface charts, charts and diagrams, and use of the Continental United States Meteorological Distribution System (COMEDS). The ABR course includes weather station operation, observer laboratory, and introduction to AWDS.

The 7-skill level ABR25170, Weather Technician (Forecaster) Course is mandatory for upgrade and prepares students to issue short-range forecasts and warnings, present weather briefings, prepare climatological and historical weather data, and to use radar and satellite weather data.

SURVEY METHODOLOGY

Inventory Development

Data for this survey were collected using USAF Job Inventory AFPT 90-251-874 (June 1991). The Inventory Developer reviewed pertinent career ladder documents, the previous job inventory and OSR, and then prepared a tentative task list. The task list was refined and validated through personal interviews with 59 subject-matter experts assigned to weather units at the following bases:

BASE	UNIT VISITED
Chanute AFB IL	3350 Technical Training Group
Scott AFB IL	HQ AWS, HQ 7WW, Det 9 17WS, USAFETAC
Peterson AFB CO	4WW, Det 6 2WS
Air Force Academy CO	Det 6 OL-A 2WS
Falcon AFB CO	Det 7 4WW
Ft Carson CO	Det 58 5WS
Langley AFB VA	5WW, Det 7 3WS
Ft Eustis VA	Det 13 5WS
Offutt AFB NE	AFGWC, 3WW, Det 1 9WS
Elmendorf AFB AK	11WS, Det 1 11WS
Ft Richardson AK	OL-A Det 5 11WS
Griffis AFB NY	Det 8 26WS
McGuire AFB NJ	15WS

Griffis and McGuire AFBs were visited because they have the AWDS system on-line. The other units visited represent a broad view of the specialty and functions performed.

The final inventory contains 870 tasks grouped under 21 duty headings and a background section asking respondents to indicate their paygrade, DAFSC, organization of assignment, MAJCOM, TAFMS, and time in career ladder. Additional background questions asked respondents to indicate the forecasting or observing functional area they spend the most time in; their work schedule; the general, solar, or tactical equipment they use; and AWDS equipment used.

Survey Administration

From August through December 1991, Military Personnel Flights at operational bases worldwide administered the surveys to AFSC 251X0/A personnel selected from a computer-generated mailing list provided by the Armstrong Laboratory, Human Resources Directorate. Respondents were asked to complete the identification and biographical information section of the job inventory booklet, then go through the booklet and mark all tasks they perform in their current job, and finally use a 9-point scale to indicate the relative amount of time they spend performing the tasks they marked. Time spent ratings range from 1 (indicating a very small amount of time spent) to 9 (indicating a very large amount of time spent).

The computer calculated the relative percent time spent on all tasks for each respondent by first totaling ratings on all tasks, dividing the rating for each task by this total, and multiplying by 100. The percent time spent ratings from all inventories were then combined and used with percent member performing values to describe various groups in the career ladder.

Survey Sample

The final sample includes responses from 1,683 AFSC 251X0 members: 648 Observer, 972 Forecaster, 41 DAFSC 25190, and 22 CEM code personnel. As shown in Tables 1 and 2, the MAJCOM and paygrade representation of the sample is very close to that of the total AFSC 251X0 population. At the time of the survey, most AFSC 251X0 personnel were assigned to Air Weather Service command, with instructors at Chanute AFB assigned to ATC. Since the survey, however, MAJCOM designation has changed, and weather personnel have assumed the MAJCOM of the base or unit they are assigned to. Figures in Table 2 show a difference in percentages of paygrades E-4 and E-5 assigned and in the sample. These differences do not impact on the findings of the survey and may reflect promotions that occurred during the time of the survey.

TABLE 1

MAJCOM REPRESENTATION IN SAMPLE

COMMAND	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
AWS	92	99
ATC	8	*

TOTAL ASSIGNED = 3,035
TOTAL ELIGIBLE = 2,377
TOTAL IN SAMPLE = 1,683
PERCENT OF ASSIGNED IN SAMPLE = 55%
PERCENT OF ELIGIBLE IN SAMPLE = 71%

* Denotes less than 1 percent

TABLE 2

PAYGRADE DISTRIBUTION OF SAMPLE

PAYGRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
E-1 to E-3	29	21
E-4	34	23
E-5	14	26
E-6	12	16
E-7	8	11
E-8	2	2
E-9	*	1

* Denotes less than 1 percent

Data Processing and Analysis

Once the job inventories were received from the field, the booklets were screened for completeness and accuracy and optically scanned to create a complete case record for each respondent. Comprehensive Occupational Data Analysis Programs (CODAP) then created a job description for each respondent, as well as composite job descriptions for members of various demographic groups. These job descriptions were used for much of the occupational analysis.

Task Factor Administration

Personnel who make decisions about career ladder documents and training programs use task factor data (training emphasis (TE) and task difficulty (TD) ratings), as well as job descriptions. The survey process provides these task factor data by asking selected E-6 and E-7 NCOs to complete either a TE or TD booklet. These booklets are processed separately from the job inventories, and TE and TD data, when applicable, are considered when analyzing other issues in the study.

Training Emphasis (TE). TE is defined as the amount of structured training that first-enlistment personnel need to perform tasks successfully. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Fifty-eight experienced Observer and thirty-six experienced Forecaster NCOs rated tasks in the inventory on a 10-point scale ranging from 0 (no TE required) to 9 (high TE required). Interrater agreement for the two groups of raters was acceptable. The average Observer TE rating is 1.50, with a standard deviation of 1.70. Tasks with a TE rating of 3.20 or greater are considered to have high TE for Observers. On the other hand, the average Forecaster TE rating is 1.88, with a standard deviation of 1.64. Tasks with a TE rating of 3.52 or greater are thus considered to have high TE for Forecasters. Separate TE ratings for Observers and Forecasters are used throughout this report and Training Extract for comparison purposes.

Task Difficulty (TD). TD is defined as an estimate of the length of time the average airman takes to learn how to perform each task listed in the inventory. Forty-one experienced NCOs rated the difficulty of the tasks in the inventory using a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). For TD, there was no distinction made between Observers and Forecasters. Interrater agreement for these 41 raters was also acceptable. TD ratings are normally adjusted so tasks of average difficulty have a value of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or greater is considered to be difficult to learn.

To assist technical school personnel, USAFOMS developed a computer program which incorporates these secondary factors and the percentage of first-enlistment personnel performing each task into a computed value, the Automated Training Indicator (ATI). ATI values correspond to training decisions listed and defined in the Training Decision Logic Table found in

Attachment 1, ATCR 52-22. ATI values allow course personnel to quickly focus their attention on tasks which most likely qualify for inclusion in the entry-level course.

SPECIALTY JOBS
(Career Ladder Structure)

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. CODAP assists by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on the tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, new members are added to this initial group, or new groups are formed based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the Job. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a cluster. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview

Based on responses from the 1,683 personnel in the survey sample, there are 19 jobs identified within the Weather career ladder (Figure 1). As expected, the Observer and Forecaster jobs are performed by a majority of career ladder members. There are also a number of more specialized jobs in the career ladder which are performed by small numbers of respondents. These jobs break out separately, based on time spent performing specific observing or forecasting tasks or time spent performing tasks related to other duties. Background information on members performing these jobs is presented in Table 3, while time members in the various jobs spent on duties is listed in Table 4. The 19 jobs are listed below. The STG number shown beside the title is a reference number assigned by CODAP, while the letter "N" refers to the number of respondents performing the job. Descriptions of the various jobs are presented below, while representative tasks performed are listed in Appendix A.

I. WEATHER OBSERVER (STG132, N=516)

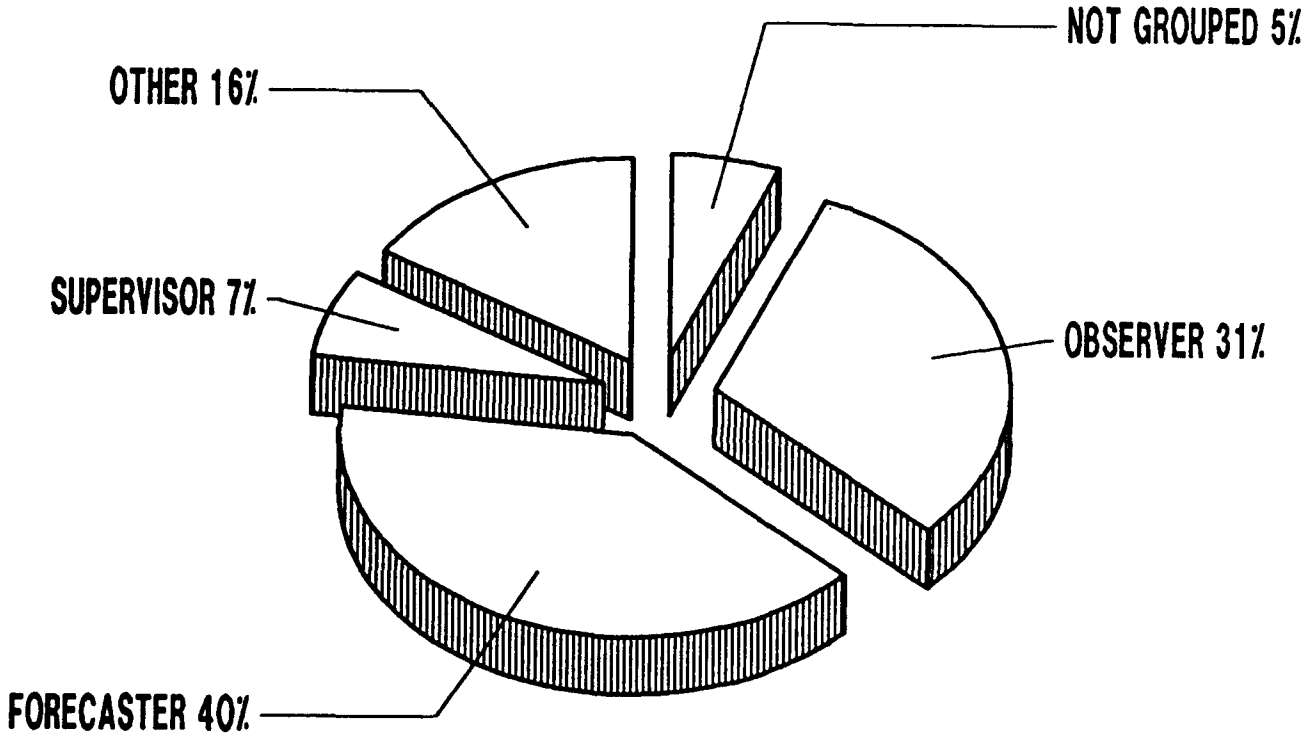
II. WEATHER FORECASTER (STG156, N=665)

III. ANALYSIS (STG062, N=28)

IV. SPACE ENVIRONMENT (STG040, N=25)

V. RADAR OBSERVER (STG196, N=10)

DISTRIBUTION OF AFSC 251X0 PERSONNEL ACROSS CAREER LADDER JOBS



OTHER JOBS

ANALYSIS	METWATCH
SPACE ENVIRONMENT	AWDS SYSTEM
RADAR OBSERVER	UPPER AIR
PLOTTER	MANAGEMENT
WEATHER CENTRAL	SUPERVISION
GLOBAL WEATHER	DATA PROCESSING
SEVERE WEATHER	DATA MONITOR
CONTINGENCY SUPPORT	DATA CONTROLLER
DUTY FORECASER	

FIGURE 1

TABLE 3

SELECTED BACKGROUND DATA ON PERSONNEL IN CAREER LADDER JOBS

	WEATHER OBSERVER	WEATHER FORE-CASTER	ANALYSIS	SPACE ENVM	RADAR OBSRV	PLOTTER	WEATHER CENTRAL OBS
NUMBER IN GROUP	516	665	28	25	10	22	8
PERCENT OF SAMPLE	31%	40%	2%	1%	*	1%	*
DAFSC DISTRIBUTION							
25130	66%	0	0	4%	90%	73%	38%
25150	33%	1%	0	4%	10%	23%	62%
25150A	1%	65%	61%	44%	0	4%	0
25170A	0	32%	39%	48%	0	0	0
25190	0	2%	0	0	0	0	0
25100	0	0	0	0	0	0	0
PAYGRADE DISTRIBUTION							
AIRMAN	56%	1%	0	4%	60%	64%	25%
E-4	42%	14%	7%	4%	30%	32%	75%
E-5	2%	48%	51%	40%	10%	4%	0
E-6	0	23%	30%	32%	0	0	0
E-7	0	12%	12%	20%	0	0	0
E-8	0	2%	0	0	0	0	0
E-9	0	0	0	0	0	0	0
AVERAGE NUMBER OF TASKS PERFORMED	102	186	35	85	51	47	40
AVERAGE MONTHS TAFMS	34	136	148	161	33	34	48
PERCENT IN FIRST ENLISTMENT	79%	2%	0	4%	80%	87%	51%
PERCENT SUPERVISING	1%	75%	32%	52%	0	5%	0

TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA ON PERSONNEL IN CAREER LADDER JOBS

	GLOBAL WEATHER OBSERVER	SEVERE WEATHER OBSERVER	CONTG SUPPORT	DUTY FORECASTER	METWATCH OBSERVER	AWD SYS MANAGER
NUMBER IN GROUP	11	21	25	14	9	11
PERCENT OF SAMPLE	*	1%	1%	*	*	*
DAFSC DISTRIBUTION						
25130	100%	0	0	0	60	0
25150	0	0	0	0	20%	0
25150A	0	38%	64%	21%	0	27%
25170A	0	62%	36%	79%	20%	55%
25190	0	0	0	0	0	18%
25100	0	0	0	0	0	0
PAYGRADE DISTRIBUTION						
AIRMAN	64%	0	0	0	40%	0
E-4	36%	10%	0	7%	40%	0
E-5	0	29%	52%	29%	20%	18%
E-6	0	42%	44%	50%	0	46%
E-7	0	19%	4%	14%	0	18%
E-8	0	0	0	0	0	18%
E-9	0	0	0	0	0	0
AVERAGE NUMBER OF TASKS PERFORMED	27	70	64	89	64	142
AVERAGE MONTHS TAFMS	24	151	139	157	51	196
PERCENT IN FIRST ENLISTMENT	100%	0	4%	0	80%	0
PERCENT SUPERVISING	18%	62%	32%	36%	0	64

TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA ON PERSONNEL IN CAREER LADDER JOBS

	UPPER AIR OBSERVER	MANAGER	SUPV	DATA PROCESS	DATA MONITOR	DATA CONTROLLER
NUMBER IN GROUP	27	18	123	29	6	7
PERCENT OF SAMPLE	1%	1%	7%	2%	*	*
DAFSC DISTRIBUTION						
25130	59	0	0	0	25%	29%
25150	41%	0	4%	0	75%	71%
25150A	0	0	11%	59%	0	0
25170A	0	44%	57%	41%	0	0
25190	0	39%	15%	0	0	0
25100	0	17%	13%	0	0	0
PAYGRADE DISTRIBUTION						
AIRMAN	67%	0	0	0	33%	43%
E-4	33%	0	3%	0	67%	57%
E-5	0	0	8%	38%	0	0
E-6	0	6%	23%	34%	0	0
E-7	0	49%	42%	28%	0	0
E-8	0	39%	12%	0	0	0
E-9	0	6%	12%	0	0	0
AVERAGE NUMBER OF TASKS PERFORMED	81	19	76	52	31	15
AVERAGE MONTHS TAFMS	28	236	216	170	48	42
PERCENT IN FIRST ENLISTMENT	96%	0	0	0	66%	71%
PERCENT SUPERVISING	0	0	70%	24%	17%	0

TABLE 4

DISTRIBUTION OF TIME SPENT ACROSS DUTIES BY CAREER LADDER JOBS
(RELATIVE PERCENT OF JOB TIME SPENT)

DUTIES	WEATHER OBSERVER (N=516)	WEATHER FORE-CASTER (N=665)	ANALYSIS (N=28)	SPACE ENVM (N=25)	RADAR OBSRV (N=10)	PLOTTER (N=22)	WEATHER CENTRAL OBS (N=8)
A ORGANIZING AND PLANNING	*	2	2	3	*	1	*
B DIRECTING AND IMPLEMENTING	2	3	4	6	2	4	4
C EVALUATING AND INSPECTING	*	4	4	6	*	*	*
D TRAINING	*	4	5	6	*	*	*
E PERFORMING ADMINISTRATIVE AND SUPPLY TASKS	*	4	1	7	1	2	2
F PERFORMING GENERAL WEATHER FUNCTIONS	21	18	22	13	34	44	44
G SERVICING WEATHER EQUIPMENT	10	3	*	4	10	15	19
H DISSEMINATING WEATHER INFORMATION	6	12	5	1	7	4	15
I PERFORMING WEATHER OBSERVING FUNCTIONS	38	10	*	*	5	7	7
J PLOTTING WEATHER INFORMATION	5	3	*	*	9	13	3
K PERFORMING WEATHER FORECASTING FUNCTIONS	*	13	12	*	*	1	*
L ANALYZING WEATHER INFORMATION	*	10	40	*	*	1	0
M OBSERVING WEATHER BY RADAR	7	6	0	0	25	*	0
N TAKING UPPER AIR OBSERVATIONS	*	*	0	*	0	0	0
O PERFORMING DROPSONDE TASKS ON WEATHER RECONNAISSANCE AIRCRAFT	0	*	0	0	0	0	0
P PERFORMING COMPUTERIZED WEATHER FUNCTIONS	*	*	*	3	*	*	3
Q PERFORMING SOLAR OBSERVATION AND FORECASING FUNCTIONS	*	*	0	49	0	0	0
R PERFORMING WEATHER SATELLITE FUNCTIONS	*	*	3	*	2	*	0
S PERFORMING SPECIAL OPERATIONS FUNCTIONS	*	*	0	0	0	0	0
T PERFORMING CONTINGENCY AND MOBILITY FUNCTIONS	3	4	*	*	1	2	1
U PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) FUNCTIONS	3	2	0	0	0	2	0

* Denotes less than 1 percent

TABLE 4 (CONTINUED)

DISTRIBUTION OF TIME SPENT ACROSS DUTIES BY CAREER LADDER JOBS
(RELATIVE PERCENT OF JOB TIME SPENT)

DUTIES	GLOBAL WEATHER OBSERVER (N=11)	SEVERE WEATHER OBSERVER (N=21)	CONTG SUPPORT (N=25)	DUTY FORECASTER (N=14)	METWATCH OBSERVER (N=9)	AWD SYS MANAGER (N=11)
A ORGANIZING AND PLANNING	2	1	2	4	3	2
B DIRECTING AND IMPLEMENTING	4	3	3	4	2	5
C EVALUATING AND INSPECTING	*	2	2	4	*	7
D TRAINING	3	4	3	5	2	9
E PERFORMING ADMINISTRATIVE AND SUPPLY TASKS	1	*	*	3	*	10
F PERFORMING GENERAL WEATHER FUNCTIONS	32	21	25	26	26	8
G SERVICING WEATHER EQUIPMENT	13	2	2	5	6	3
H DISSEMINATING WEATHER INFORMATION	5	8	8	10	7	4
I PERFORMING WEATHER OBSERVING FUNCTIONS	10	2	3	3	5	3
J PLOTTING WEATHER INFORMATION	21	1	*	3	7	*
K PERFORMING WEATHER FORECASTING FUNCTIONS	2	18	25	11	3	2
L ANALYZING WEATHER INFORMATION	*	29	22	16	6	4
M OBSERVING WEATHER BY RADAR	*	6	0	*	*	3
N TAKING UPPER AIR OBSERVATIONS	0	0	0	0	0	0
O PERFORMING DROPSONDE TASKS ON WEATHER RECONNAISSANCE AIRCRAFT	0	0	0	0	0	0
P PERFORMING COMPUTERIZED WEATHER FUNCTIONS	2	*	*	1	*	3
Q PERFORMING SOLAR OBSERVATION AND FORECASING FUNCTIONS	0	0	0	0	0	0
R PERFORMING WEATHER SATELLITE FUNCTIONS	3	*	3	2	*	*
S PERFORMING SPECIAL OPERATIONS FUNCTIONS	0	0	0	0	0	0
T PERFORMING CONTINGENCY AND MOBILITY FUNCTIONS	3	*	*	2	0	*
U PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) FUNCTIONS	*	0	0	0	30	35

* Denotes less than 1 percent

TABLE 4 (CONTINUED)

DISTRIBUTION OF TIME SPENT ACROSS DUTIES BY CAREER LADDER JOBS
(RELATIVE PERCENT OF JOB TIME SPENT)

DUTIES	UPPER AIR OBSERVER (N=11)	MANAGER (N=18)	SUPV (N=123)	DATA PROCESS (N=29)	DATA MONITOR (N=6)	DATA CONTROLLER (N=7)
A ORGANIZING AND PLANNING	*	11	15	5	2	0
B DIRECTING AND IMPLEMENTING	2	16	13	6	8	2
C EVALUATING AND INSPECTING	*	19	22	3	5	0
D TRAINING	2	4	10	5	8	*
E PERFORMING ADMINISTRATIVE AND SUPPLY TASKS	2	45	18	9	*	3
F PERFORMING GENERAL WEATHER FUNCTIONS	13	3	6	3	51	29
G SERVICING WEATHER EQUIPMENT	9	*	*	*	10	8
H DISSEMINATING WEATHER INFORMATION	3	*	1	*	2	1
I PERFORMING WEATHER OBSERVING FUNCTIONS	17	0	*	*	0	0
J PLOTTING WEATHER INFORMATION	3	0	*	*	0	0
K PERFORMING WEATHER FORECASTING FUNCTIONS	*	0	2	*	0	0
L ANALYZING WEATHER INFORMATION	1	*	1	3	0	0
M OBSERVING WEATHER BY RADAR	0	0	*	0	0	0
N TAKING UPPER AIR OBSERVATIONS	43	0	*	0	0	0
O PERFORMING DROPSONDE TASKS ON WEATHER RECONNAISSANCE AIRCRAFT	0	0	0	0	0	0
P PERFORMING COMPUTERIZED WEATHER FUNCTIONS	1	1	6	61	22	56
Q PERFORMING SOLAR OBSERVATION AND FORECASTING FUNCTIONS	*	0	*	0	0	0
R PERFORMING WEATHER SATELLITE FUNCTIONS	0	*	*	1	0	0
S PERFORMING SPECIAL OPERATIONS FUNCTIONS	*	0	*	0	0	0
T PERFORMING CONTINGENCY AND MOBILITY FUNCTIONS	1	0	3	*	0	0
U PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) FUNCTIONS	*	*	1	2	0	*

* Denotes less than 1 percent

VI. PLOTTER (STG172, N=22)

VII. WEATHER CENTRAL OBSERVER (STG259, N=8)

VIII. GLOBAL WEATHER OBSERVER (STG181, N=11)

IX. SEVERE WEATHER FORECASTER (STG242, N=21)

X. CONTINGENCY SUPPORT (STG188, N=25)

XI. DUTY FORECASTER (STG189, N=14)

XII. METWATCH OBSERVER (STG184, N=9)

XIII. AWDS SYSTEM MANAGER (STG171, N=11)

XIV. UPPER AIR OBSERVER (STG178, N=27)

XV. MANAGER (STG105, N=18)

XVI. SUPERVISOR (STG020, N=123)

XVII. DATA PROCESSING (STG036, N=29)

XVIII. DATA MONITOR (STG155, N=6)

XIX. DATA CONTROLLER (STG149, N=7)

I. WEATHER OBSERVER (STG132, N=516). Weather Observer is the job performed by most entry-level AFSC 251X0 personnel. Eighty-one percent of all DAFSC 25130 and 74 percent of all DAFSC 25150 respondents indicate they are Observers. The job involves performing an average of 102 tasks related to measuring and recording weather parameters, plotting the information, and servicing weather equipment. Weather Observers spend most of their time performing the following tasks:

determine number and amount of coverage of cloud layers aloft
determine ceiling
advise forecasters of changing weather conditions
determine weather and obstructions to visions
determine horizontal visibilities, such as prevailing or sector
encode observations on AWS Forms 10 (Airways Observations)

II. WEATHER FORECASTER (STG156, N=665). Weather Forecasters are more senior personnel, averaging 136 months TAFMS, who have completed the 7-skill level course and have the A-shred designation. In this survey, 77 percent of DAFSC 25150A, 52 percent of DAFSC 25170A, and 32 percent of DAFSC 25190 respondents indicated they are Forecasters. The job differs from the Observer in that Forecasters analyze weather information; issue, amend, or cancel weather forecasts using data provided by Observers; and use various types of audiovisual equipment to present weather data. Tasks Forecasters spend most time performing are:

brief aircrews
issue weather forecasts
complete pilot weather briefing forms
encode weather forecasts
decode weather forecasts
analyze upper air charts

III. ANALYSIS (STG062, N=28). Analysis jobs are performed by more senior 5- and 7-skill level Forecasting personnel stationed at Offutt AFB. Members performing the analysis jobs average 148 months TAFMS, and most are in the E-5 or E-6 paygrade. These analysis jobs are rather limited, as members perform an average of only 35 tasks while devoting 40 percent of their duty time to analyzing various charts, plots, and maps. Examples of tasks which distinguish members with this job from the others include:

analyze synoptic surface charts
analyze satellite data
analyze vorticity charts
analyze thickness charts
analyze upper level winds
analyze sensible weather plots

Survey data show there are two job variations. Most of the 15 Synoptical Forecasters (STG154) are in paygrade E-5 and hold DAFSC 25150A. They spend more time analyzing various types of charts and preparing facsimile products. Four of the five Tropical Forecasters (STG215), on the other hand, hold the 7-skill level and are distinguished by the time they spend tracking, plotting, and reporting tropical storm activity.

IV. SPACE ENVIRONMENT (STG040, N=25). These unique jobs are performed by Forecaster personnel, most of whom are in paygrades E-5 and E-6, and all but two are stationed overseas. Members with these jobs spend almost half their duty time performing solar observations and forecasts, compiling data for reports, and transmitting solar information. The following are typical analysis tasks:

perform H alpha analysis
perform flare patrols in automatic mode
transmit event notifications
transmit solar optical reports
monitor astrogeophysical data bases
analyze and report solar flares

Survey data show there are two variations, Solar Analyst and Space Environment Analyst. The 16 Solar Analysts devote their time to recording and analyzing solar data, while the 8 Space Environment Analysts spend their time preparing reports of solar events, preparing warnings, and forecasting effects on radio communications.

V. RADAR OBSERVER (STG196, N=10). This is a variation of the basic Observer job performed by 10 fairly new Weather personnel. Nine hold the 3-skill level and are in paygrades E-1 through E-4, and average 33 months TAFMS. The job is somewhat limited as Radar Observers perform an average of 51 tasks related to making radar observations and are distinguished by the time they spend on the following tasks:

determine echo intensities
determine echo intensity trends
determine echo tops
determine speed and direction of echo movements
determine echo intensity trends
log radar observations

VI. PLOTTER (STG172, N=22). This job is another variation of the basic Observer job and is also performed by fairly new personnel. Sixteen hold the 3-skill level, and 14 are in paygrades E-1 to E-3. Personnel with this job spend most of their time performing an average of 47 tasks related to general weather functions and plotting weather information. They spend most of their time performing the following tasks:

file teletype messages
post charts
tear maps from facsimile printers
file automated facsimile charts
file plotted charts or maps
plot position of tropical storms

VII. WEATHER CENTRAL (STG259, N=8). This job is performed by airmen in paygrade E-4 stationed at Traben Trarbach. These 8 Observers perform an average of 40 tasks related to general weather functions and disseminating weather information. What distinguishes this job from others is the time members at Traben Trarbach spend performing the following tasks:

tear maps from facsimile printers
transmit teletype messages
transmit weather advisories, warnings, or watches
transmit weather maps or charts on weather facsimile networks
replace facsimile paper rolls
label weather maps and charts for facsimile network transmissions

VIII. GLOBAL WEATHER OBSERVER (STG181, N=11). The 11 3-skill level Observers with this job are assigned to the Air Force Global Weather Central at Offutt AFB. All are either in paygrade E-3 or E-4, and all are in their first enlistment. They perform an average of 24 tasks and spend most of their time plotting adverse weather conditions. They are distinguished by the time they spend performing the following tasks:

plot turbulence reports
reproduce weather charts
plot icing reports
decode teletype messages
plot severe weather reports
file teletype messages

IX. SEVERE WEATHER FORECASTER (STG242, N=21). This job is also performed at Air Force Global Weather Central at Offutt AFB by 5- and 7-skill level Forecasters. Forecasters with this job perform an average of 70 tasks related to decoding and analyzing various sources of information and preparing weather warnings. Severe Weather Forecasters spend most time performing the following tasks:

analyze severe weather features
prepare weather warnings
perform meteorological watches (METWATCHES), such as area or terminal
analyze satellite data
analyze upper air charts
analyze vorticity charts

X. CONTINGENCY SUPPORT (STG188, N=25). The 25 5- and 7-skill level Forecasters performing this job are assigned to Offutt AFB and report having the job title of Contingency Support Forecaster. These are more experienced NCOs who average 139 months TAFMS and are in paygrades E-5 and E-6. While they spend most of their duty time performing forecasting and general weather functions, they are distinguished by the time they spend on the following tasks:

analyze satellite data
prepare short range weather forecasts
prepare centralized terminal forecasts
prepare drop zone forecasts
analyze sensible weather plots
prepare aircraft operations forecasts

XI. DUTY FORECASTER (STG189; N=14). This is another variation of the basic Forecaster job performed by more experienced 7-skill level personnel. Members with this job spend half their duty time performing tasks related to general weather functions and forecasting activities. What distinguishes this job from others is the time members spend preparing and presenting briefings, as shown by the tasks below:

prepare briefing charts, notes, or transparencies
brief nonweather personnel
brief commanders
process facsimile charts for displays
conduct shift change briefings
brief alert controllers

XII. METWATCH OBSERVER (STG184, N=5). This is a somewhat limited job performed by four Weather personnel at McGuire AFB and by one at Scott AFB. These 5 personnel average 51 months TAFMS and report performing an average of 64 tasks, most of which deal with operating the AWDS system to receive and display weather information. Members with this job are distinguished by the time they spend performing the following tasks:

print AWDS alphanumeric or graphics products
decode weather forecasts
display AWDS products
monitor receipt of AWDS weather data
reboot AWDS programs
create, update, or display AWDS product loop sequences
perform meteorological watches (METWATCHES), such as
area or terminal

XIII. AWDS SYSTEM MANAGER (STG171, N=11). More senior Forecaster personnel perform the AWDS System Manager job. Three of the eleven hold DAFSC 25150A, six hold DAFSC 25170A, and two are at the 9-skill level. Forecasters with this job perform an average of 142 tasks and spend 35 percent of their duty time performing AWDS functions. This job differs from the METWATCH job described above, as it involves creating AWDS products rather than just receiving and displaying the products. This difference is clearly shown by the following most frequently performed tasks:

generate AWDS horizontal products
create or modify AWDS tables, such as external products retention tables or station select surface tables
troubleshoot AWDS deficiencies or outages
decode product identifications (PIDS)
input AWDS alphanumeric weather data
create or edit AWDS command sequences

XIV. UPPER AIR OBSERVER (STG178, N=27). All but one of these Observers are in their first enlistment, 16 hold the 3-skill level, and 11 hold the 5-skill level. While eight report having the title Range Observer and the others Rawinsonde Operator, they all perform essentially the same job. Upper Air Observers perform an average of 81 tasks, spend nearly half their duty time preparing rawinsonde balloons and instruments for launches, and are distinguished by the time they spend performing the following tasks:

assemble rawinsonde balloon equipment
operate rawinsonde set equipment at release
transmit rawinsonde reports
inflate balloons with helium
obtain balloon release clearances
verify upper air data

XV. MANAGER (STG105, N=18). Survey data show there are three management jobs performed by small numbers of the most senior Weather personnel. Nine are in paygrade E-7, seven are in paygrade E-8, and the last two are in paygrade E-9. Members with management jobs perform an average of only 19 tasks listed in the job inventory and spend almost half their duty time performing administrative and supply functions. The following are representative management tasks:

write correspondence
edit official correspondence or messages
compile data for staff studies
review incoming or outgoing correspondence
prepare correspondence for mailing
compile data for reports

Five of the Managers are assigned to HQ Air Weather Service at Scott AFB and are involved with computer system management. Five others are more involved with support requirements. The remaining Managers are assigned to MAJCOM headquarters positions and are more involved with communications-computer systems requirements.

XVI. SUPERVISOR (STG020, N=123). Four separate supervisory jobs were identified from survey data. Members with these jobs are mainly in paygrades E-6 and E-7. Almost all hold the 7- or 9-skill level, or are CEMs, and average 216 months TAFMS. Seventy percent report having supervisory responsibility. Representative tasks include:

write correspondence
compile data for reports
determine work priorities
write EPRs
counsel subordinates on personal or military-related matters
evaluate personnel for compliance with performance standards

Survey data show there is a group of eight E-7 NCOICs who spend most of their time determining work priorities, conducting feedback sessions, and conducting OJT. There is an additional group of 51 Weather Station Operations Chiefs who perform common supervisory tasks. The 14 Operations Managers are mainly in paygrades E-8 and E-9 and perform tasks related to staff positions. The final group of 11 members of the Supervisor Cluster are in paygrades E-6 through E-8 and spend more time performing tasks related to supply functions.

XVII. DATA PROCESSING (STG036, N=29). Weather personnel working in Data Processing jobs were identified separately because they spend 61 percent of their duty time performing tasks related specifically to computerized weather functions. Airmen with these jobs average 170 months TAFMS, hold either DAFSC 25150A or 25170A, are in paygrades E-5 through E-7, and are stationed at either Scott AFB or Offutt AFB. Typical data processing tasks performed by these members are:

test weather computer software
update computer software
write computer runstreams
write computer software codes
perform software project management
submit computer runstreams

Survey data show there are three separate jobs within the cluster. There is the Special Project Analyst job performed by five respondents assigned to USAFETAC at Scott AFB which involves evaluating computer outputs. The System Analyst job is performed at several bases and deals with project management and software design. The five Programmers were identified separately because of the time they spend writing software codes and runstreams, testing software, and loading memory devices.

XVIII. DATA MONITOR (STG155, N=6). The Data Monitor job involves a mixture of weather and data processing functions. Five of the six members performing this job hold the 5-skill level, the sixth holds the 3-skill level; they average 48 months TAFMS and perform an average of only 31 tasks. Typical tasks include:

edit computer rejected weather data
make entries in station logs
file teletype messages
perform building security checks
decode forecast bulletins
decode teletype messages

XIX. DATA CONTROLLER (STG149, N=7). This job is performed by first-enlistment airmen stationed at Carswell AFB. This is the most limited job in the career ladder, as members spend over half their duty time performing an average of only 15 computerized weather tasks. These seven members are distinguished by the time they spend performing the following tasks:

activate or deactivate contingency packages on communications networks
initiate corrective procedures for data errors
evaluate retargeting global weather intercept program (GWIP) data
trace missing bulletins or messages
relay special data requests
reinsert RTD weather reports into computer systems

Comparison of Specialty Jobs

Jobs identified in the current study were compared to those identified in the previous OSR (see Table 5). The two major jobs in both studies were Observer and Forecaster, with variations on these two performed by smaller groups of respondents. Differences in jobs identified in the current study result from changes in the career ladder, differences in the tasks listed in the job inventories, and the current use of task clustering to help identify jobs performed. Weather personnel are no longer involved with dropsonde equipment, and technical school instructors were not identified separately as before. On the other hand, Analysis jobs, not identified in the last survey, were identified in the current study as were the Duty Forecaster, METWATCH Observer, and AWDS System Manager jobs. Overall, the work performed by members of this career ladder has remained fairly stable over the years.

TABLE 5

COMPARISON OF JOB TITLES IN CURRENT STUDY VERSUS 1988 STUDY

JOBS IDENTIFIED IN CURRENT STUDY	JOBS IDENTIFIED IN PREVIOUS STUDY
WEATHER OBSERVER	WEATHER OBSERVATION PERSONNEL
WEATHER FORECASTER	WEATHER FORECASTING PERSONNEL
ANALYSIS CLUSTER	NOT MATCHED
SPACE ENVIRONMENT CLUSTER	SOLAR OBSERVING AND FORECASTING PERSONNEL
RADAR OBSERVER	RADAR OBSERVER PERSONNEL
PLOTTER	PLOTTER PERSONNEL
WEATHER CENTRAL GLOBAL WEATHER OBSERVER SEVERE WEATHER FORECASTER	GLOBAL WEATHER CENTRAL PERSONNEL
CONTINGENCY SUPPORT	SPECIAL OPERATIONS PERSONNEL
DUTY FORECASTER	NOT MATCHED
METWATCH OBSERVER	NOT MATCHED
AWDS SYSTEM MANAGER	NOT MATCHED
UPPER AIR OBSERVER	UPPER AIR OBSERVER PERSONNEL
MANAGERIAL CLUSTER	NOT MATCHED
SUPERVISORY CLUSTER	WEATHER STATION SUPERVISORS SENIOR SUPERVISORS
DATA PROCESSING CLUSTER	COMPUTER PERSONNEL
DATA MONITOR	DATA MONITOR PERSONNEL
DATA CONTROLLER	NOT MATCHED
NOT MATCHED	DROPSONDE PERSONNEL
NOT MATCHED	INSTRUCTOR PERSONNEL

Summary

Most Weather personnel perform either the Weather Observer or Weather Forecaster jobs. There are a number of variations to these two jobs performed by smaller numbers of Weather personnel. The variations are distinguished by the number of tasks performed or emphasis on specific tasks related to one duty. Jobs identified in the present study are very similar to those reported in 1988. Differences in jobs identified are due to equipment changes reflected in the task list and the use of task clustering to help identify jobs performed.

CAREER LADDER PROGRESSION

Analysis of DAFSC groups, together with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed by members of the various skill-level groups, which in turn may be used to determine how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS), reflect how members of the various skill-level groups are being used.

The distribution of skill-level members across the various jobs is shown in Table 6, and relative amounts of time members of the various skill-level groups spend on duties is shown in Table 7. Data in these tables show most AFSC 25130 and 25150 personnel have the Observer job and spend most of their time performing weather observing and general weather tasks. Most AFSC 25150A personnel, on the other hand, are Forecasters and spend most of their time performing general weather, forecasting, and analysis functions. AFSC 25170A personnel perform a mixture of technical forecasting and supervisory tasks. Nine-skill level and CEM code members are both supervisors and managers of the career ladder. A more detailed discussion of each skill level is presented below.

SKILL-LEVEL DESCRIPTIONS

DAFSC 25130/50. Survey data show 79 percent of all AFSC 25130/50 personnel have the Weather Observer technical job, with smaller percentages performing other observer and data processing jobs. As shown in Table 8, 3- and 5-skill level members spend a majority of their time performing tasks related to observing and recording various weather parameters and servicing weather equipment.

TABLE 6

DISTRIBUTION OF SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT)

JOB	25130/50 (N=647)	25150A (N=560)	25170A (N=411)	25190/00 (N=63)
WEATHER OBSERVER	79	1	0	0
WEATHER FORECASTER	1	77	52	21
ANALYSIS	0	3	3	0
SPACE ENVIRONMENT	*	2	3	0
RADAR OBSERVER	1	0	0	0
PLOTTER	3	*	0	0
WEATHER CENTRAL OBSERVER	1	0	0	0
GLOBAL WEATHER OBSERVER	2	0	0	0
SEVERE WEATHER FORECASTER	0	1	3	0
CONTINGENCY SUPPORT	0	3	2	0
DUTY FORECASTER	0	*	3	0
METWATCH OBSERVER	1	0	*	0
AWDS SYSTEM MANAGER	0	*	*	3
UPPER AIR OBSERVER	4	0	0	0
MANAGER	0	0	2	16
SUPERVISOR	1	3	17	54
DATA PROCESSING	0	3	3	0
DATA MONITOR	1	0	0	0
DATA CONTROLLER	1	0	0	0
NOT GROUPED	4	6	10	6

* Denotes less than 1 percent

TABLE 7

TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

DUTIES	25130/50 (N=647)	25150A (N=560)	25170A (N=411)	25190/00 (N=63)
A ORGANIZING AND PLANNING	*	2	6	13
B DIRECTING AND IMPLEMENTING	2	3	7	12
C EVALUATING AND INSPECTING	*	2	9	26
D TRAINING	1	3	7	6
E PERFORMING ADMINISTRATIVE AND SUPPLY TASKS	1	3	9	21
F PERFORMING GENERAL WEATHER FUNCTIONS	23	19	13	5
G SERVICING WEATHER EQUIPMENT	10	3	2	1
H DISSEMINATING WEATHER INFORMATION	6	11	6	2
I PERFORMING WEATHER OBSERVING FUNCTIONS	32	9	5	2
J PLOTTING WEATHER INFORMATION	6	2	1	*
K PERFORMING WEATHER FORECASTING FUNCTIONS	*	13	8	2
L ANALYZING WEATHER INFORMATION	*	12	8	2
M OBSERVING WEATHER BY RADAR	6	5	3	1
N TAKING UPPER AIR OBSERVATIONS	2	*	*	0
O PERFORMING DROPSONDE TASKS ON WEATHER RECONNAISSANCE AIRCRAFT	0	0	0	0
P PERFORMING COMPUTERIZED WEATHER FUNCTIONS	2	3	3	1
Q PERFORMING SOLAR OBSERVATION AND FORECASING FUNCTIONS	*	1	2	0
R PERFORMING WEATHER SATELLITE FUNCTIONS	*	1	1	*
S PERFORMING SPECIAL OPERATIONS FUNCTIONS	*	*	*	*
T PERFORMING CONTINGENCY AND MOBILITY FUNCTIONS	2	3	4	4
U PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) FUNCTIONS	2	2	2	1

* Denotes less than 1 percent

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY AFSC 25130/50 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=647)
F173	CLEAN WEATHER FACILITIES	91
G234	CHANGE PRINTER RIBBONS	88
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	82
I339	DETERMINE WEATHER AND OBSTRUCTIONS TO VISIONS	81
I352	MEASURE PRECIPITATION	81
I335	DETERMINE NUMBER AND AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	80
F188	FILE TELETYPE MESSAGES	80
I330	DETERMINE CEILING	80
I334	DETERMINE HORIZONTAL VISIBILITIES, SUCH AS PREVAILING OR SECTOR	80
I333	DETERMINE EXISTENCE AND AMOUNT OF OBSCURATIONS	79
I336	DETERMINE PRECIPITATION CHARACTERISTICS	77
J386	PLOT SKEW-T DIAGRAMS	77
I332	DETERMINE DEW POINTS	77
I358	READ DRY AND WET BULB TEMPERATURES	77
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	76
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	74
G254	REPLACE PAPER ON TELETYPES	74
F187	FILE PLOTTED CHARTS OR MAPS	74
F208	POST CHARTS	73
I367	TEAR MAPS FROM FACSIMILE PRINTERS	72
I340	DETERMINE WIND VELOCITIES AND CHARACTERISTICS	72
J376	PLOT LOCAL AREA WORK CHARTS (LAWCs)	71
F210	POST TELETYPE MESSAGES	70
F195	MAKE ENTRIES IN STATION LOGS	70
I326	COMPUTE SEA LEVEL PRESSURES	69
G246	REPLACE FACSIMILE PAPER ROLLS	69
B31	CONDUCT SHIFT CHANGE BRIEFINGS	69
F177	DECODE TELETYPE MESSAGES	67
I341	ENCODE OBSERVATIONS ON AWS FORMS 10 (AIRWAYS OBSERVATIONS)	66
F185	FILE AUTOMATED FACSIMILE CHARTS	65
I350	MEASURE HEIGHT OF CLOUD LAYERS USING LASER BEAM CEILOMETERS (LBCs)	64

DAFSC 25150A. Weather personnel working in a DAFSC 25150A billet have attended the advanced Weather Technician course. Seventy-seven percent perform the Forecaster job, with smaller percentages performing other forecasting and data processing jobs. As shown in Tables 7 and 9, most spend a majority of their time performing forecasting, analysis, and disseminating tasks. The difference between 3- and 5-skill level Observer and 5-skill level Forecaster personnel is shown by figures in Table 10 where higher percentages of DAFSC 25130/50 personnel perform observing tasks shown in the top half of the table, and more DAFSC 25150A personnel perform forecasting tasks listed in the lower half.

DAFSC 25170A. AFSC 25170A personnel perform a mixture of both technical forecasting and supervisory tasks (see Table 11). Figures listed in Table 7 show 7-skill level personnel spend over a third of the time performing supervisory and administrative duties and the rest on technical tasks. The supervisory role of 7-skill level members is shown by tasks which best distinguish between AFSC 25130/50 and 25170A and between 25150A and 25170A members, listed in Tables 12 and 13. In both cases more 7-skill level members perform supervisory and administrative tasks listed in the lower half of the tables.

DAFSC 25190/00. Nine-skill level and CEM-code personnel spend more time than other skill-level groups performing administrative functions (see Table 7). They perform an average of 104 tasks, most of which are related to managing the career ladder (see Table 14). Tasks which best distinguish between 7-skill level and DAFSC 25190/00 members are listed in Table 15. These figures show more 7-skill level members perform forecasting tasks, while more of the senior group members perform administrative tasks.

Summary

Survey data show there is a typical progression through the skill levels. Three- and 5-skill level personnel are Weather Observers. Seven-skill level personnel are Forecasters assigned to either a 5- or 7-skill level Forecasting billet and have some supervisory responsibility. Nine-skill level and CEM-code personnel are more involved with management and administrative duties than members of the other skill levels.

AFR 39-1 SPECIALTY JOB DESCRIPTION ANALYSIS

The current AFR 39-1 Specialty Descriptions for the career ladder were compared to the job descriptions for each job identified and to each DAFSC group. Survey data suggest the jobs and tasks included in the current AFR 39-1 Specialty Descriptions accurately reflect the work being done by Weather personnel in the field.

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY AFSC 25150A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=560)
F178	DECODE WEATHER FORECASTS	85
F177	DECODE TELETYPE MESSAGES	84
F173	CLEAN WEATHER FACILITIES	83
B31	CONDUCT SHIFT CHANGE BRIEFINGS	82
F176	DECODE FORECAST BULLETINS	82
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	82
L464	ANALYZE UPPER AIR CHARTS	81
F181	ENCODE WEATHER FORECASTS	80
L456	ANALYZE SKEW-T DIAGRAMS	80
K399	AMEND WEATHER FORECASTS	80
H287	ISSUE WEATHER FORECASTS	79
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	79
K433	VERIFY FORECASTS	78
H288	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER ADVISORIES	78
H289	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER WARNINGS	78
L453	ANALYZE SATELLITE DATA	77
L446	ANALYZE LAWCs	77
L466	ANALYZE VORTICITY CHARTS	76
H269	BRIEF AIRCREWS	76
K428	PREPARE WEATHER WARNINGS	76
H277	COMPLETE PILOT WEATHER BRIEFING FORMS	73
K426	PREPARE WEATHER ADVISORIES	73
K435	VERIFY WEATHER ADVISORIES	73
F195	MAKE ENTRIES IN STATION LOGS	73
F204	PERFORM PMSV CONTACTS	72
H305	TRANSMIT WEATHER ADVISORIES, WARNINGS, OR WATCHES	70
F179	ENCODE MESSAGES	68
F214	PREPARE DAILY WEATHER MAPS	67
L461	ANALYZE THICKNESS CHARTS	66
L465	ANALYZE UPPER LEVEL WINDS	64
K407	PREPARE AIRCRAFT OPERATIONS FORECASTS	63
F206	PERFORM QUALITY ASSURANCE PROCEDURES	61
K431	PROG SURFACE OR UPPER AIR FEATURES	60
L459	ANALYZE SYNOPTIC SURFACE CHARTS	57
K424	PREPARE SHORT RANGE WEATHER FORECASTS	59

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 25130/50 AND DAFSC 25150A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		25130/50 (N=647)	25150A (N=560)	DIFFERENCE
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	82	44	38
I358	READ DRY AND WET BULB TEMPERATURES	77	41	36
I352	MEASURE PRECIPITATION	81	47	34
I333	DETERMINE EXISTENCE AND AMOUNT OF OBSCURATIONS	79	46	33
I336	DETERMINE PRECIPITATION CHARACTERISTICS	77	45	32
I335	DETERMINE NUMBER AND AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	80	48	32
K399	AMEND WEATHER FORECASTS	1	80	-79
H287	ISSUE WEATHER FORECASTS	3	79	-76
K433	VERIFY FORECASTS	3	78	-75
L453	ANALYZE SATELLITE DATA	4	77	-73
L464	ANALYZE UPPER AIR CHARTS	9	81	-72
L466	ANALYZE VORTICITY CHARTS	4	76	-72

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY AFSC 25170A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=411)
B27	COMPILE DATA FOR REPORTS	71
C52	CONDUCT PERFORMANCE FEEDBACK WORKSHEET (PFW) SESSIONS	70
B31	CONDUCT SHIFT CHANGE BRIEFINGS	69
E126	EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	69
F178	DECODE WEATHER FORECASTS	69
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	67
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	66
D99	EVALUATE PROGRESS OF TRAINEES	66
C82	WRITE EPRs	65
C59	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	63
E171	WRITE CORRESPONDENCE	62
B35	COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	62
F176	DECODE FORECAST BULLETINS	62
K433	VERIFY FORECASTS	62
F173	CLEAN WEATHER FACILITIES	62
H287	ISSUE WEATHER FORECASTS	61
B46	ORIENT NEWLY ASSIGNED PERSONNEL	61
A5	DETERMINE WORK PRIORITIES	60
L466	ANALYZE VORTICITY CHARTS	59
C83	WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	58
A22	PREPARE BRIEFING CHARTS, NOTES, OR TRANSPARENCIES	58
L453	ANALYZE SATELLITE DATA	57
F206	PERFORM QUALITY ASSURANCE PROCEDURES	55
C71	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	54
F195	MAKE ENTRIES IN STATION LOGS	53
D86	CONDUCT OJT	53
D90	COUNSEL TRAINEES ON TRAINING PROGRESS	53
F181	ENCODE WEATHER FORECASTS	52
L464	ANALYZE UPPER AIR CHARTS	49
A17	ESTABLISH WORK SCHEDULES	47
B39	IMPLEMENT QUALITY ASSURANCE PROCEDURES	46
F177	DECODE TELETYPE MESSAGES	39
E169	REVIEW INCOMING OR OUTGOING CORRESPONDENCE	31

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 25150A AND DAFSC 25170A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		25150A (N=560)	25170A (N=411)	DIFFERENCE
H288	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER ADVISORIES	78	53	25
F203	PERFORM PILOT-TO-METRO SERVICE (PMSV) RADIO CHECKS	71	47	24
L456	ANALYZE SKEW-T DIAGRAMS	80	58	22
L461	ANALYZE THICKNESS CHARTS	66	44	22
H289	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER WARNINGS	78	56	22
F223	RECORD OR ENCODE PILOT REPORTS (PIREPs)	74	53	21
A17	ESTABLISH WORK SCHEDULES	8	47	-39
E171	WRITE CORRESPONDENCE	21	56	-35
A9	DEVELOP QUALITY ASSURANCE PROGRAMS	4	37	-33
A21	PLAN WORK ASSIGNMENTS	6	39	-33
C60	EVALUATE PERSONNEL FOR RETENTION IN AIR FORCE	15	47	-32
C62	EVALUATE QUALITY ASSURANCE PROCEDURES	9	40	-31

TABLE 13

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 25130/50 AND DAFSC 25170A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		25130/50 (N=647)	25170A (N=411)	DIFFERENCE
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	82	34	48
I352	MEASURE PRECIPITATION	81	34	47
I354	PERFORM BAROMETER COMPARISONS	72	26	46
I358	READ DRY AND WET BULB TEMPERATURES	77	32	45
I339	DETERMINE WEATHER AND OBSTRUCTIONS TO VISIONS	81	36	45
I330	DETERMINE CEILING	80	35	45
C82	WRITE EPRs	1	71	-70
C52	CONDUCT PERFORMANCE FEEDBACK WORKSHEET (PFW) SESSIONS	1	66	-65
B35	COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	4	69	-65
C83	WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	1	62	-61
L443	ANALYZE GEOGRAPHICAL DATA	3	63	-60
L453	ANALYZE SATELLITE DATA	4	62	-58

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY AFSC 25190/00 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=63)
E171	WRITE CORRESPONDENCE	92
E126	EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	79
B27	COMPILE DATA FOR REPORTS	78
C59	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	73
C75	REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	71
A5	DETERMINE WORK PRIORITIES	71
A15	DRAFT DIRECTIVES OR DIRECTIVE CHANGES	67
B35	COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	65
C60	EVALUATE PERSONNEL FOR RETENTION IN AIR FORCE	65
C71	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	65
C73	PERFORM SELF-INSPECTIONS	65
B46	ORIENT NEWLY ASSIGNED PERSONNEL	63
C83	WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	62
C66	EVALUATE WEATHER SUPPORT REQUIREMENTS	60
C77	REVIEW STAFF ASSISTANCE VISIT REPORTS	60
A3	DETERMINE LOGISTICS REQUIREMENTS, SUCH AS EQUIPMENT, PERSONNEL, OR SPACE	60
C61	EVALUATE PROPOSED PUBLICATIONS	59
C82	WRITE EPRs	59
C76	REVIEW INSPECTION REPORTS	59
C70	INSPECT FACILITIES	56
A16	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	56
E169	REVIEW INCOMING OR OUTGOING CORRESPONDENCE	54
C62	EVALUATE QUALITY ASSURANCE PROCEDURES	54
B33	COORDINATE MAINTENANCE OF EQUIPMENT OR FACILITIES WITH APPROPRIATE AGENCIES	52
D97	EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	49
C68	INDORSE ENLISTED PERFORMANCE REPORTS (EPRs)	49
A22	PREPARE BRIEFING CHARTS, NOTES, OR TRANSPARENCIES	48
C80	REVIEW UNIT RESPONSES TO STAFF ASSISTANCE VISIT FINDINGS	48
B28	COMPILE DATA FOR STAFF STUDIES	46
E158	PREPARE CORRESPONDENCE FOR MAILING	44
C64	EVALUATE SELF-INSPECTION PROGRAMS	43

TABLE 15

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 25170A AND DAFSC 25190/00 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		25170A (N=411)	25190/00 (N=63)	DIFF
B31	CONDUCT SHIFT CHANGE BRIEFINGS	65	17	48
L464	ANALYZE UPPER AIR CHARTS	62	22	40
F181	ENCODE WEATHER FORECASTS	61	24	37
F178	DECODE WEATHER FORECASTS	69	32	37
L446	ANALYZE LAWCs	57	21	36
L466	ANALYZE VORTICITY CHARTS	58	22	36
C75	REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	27	71	-44
C61	EVALUATE PROPOSED PUBLICATIONS	16	59	-43
E126	EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	39	79	-40
A15	DRAFT DIRECTIVES OR DIRECTIVE CHANGES	30	67	-37
E171	WRITE CORRESPONDENCE	56	92	-36
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	27	59	-32

TRAINING ANALYSIS

Occupational survey data are a source of information which can be used to assist in the development of relevant training programs for both entry-level and 7-skill level personnel. Factors used to evaluate entry-level Weather training include jobs being performed by first-enlistment personnel, overall distribution of first-enlistment personnel across career ladder jobs, percent first-job (1-24 month TAFMS) and first-enlistment (1-48 months TAFMS) members performing specific tasks or using certain equipment, ratings by Observer personnel of how much training emphasis (TE) tasks should receive in formal training, and ratings of relative task difficulty (TD).

Factors used to evaluate formal 7-skill level training include jobs performed by 7-skill level members, percent 7-skill level members performing tasks, ratings by Forecaster personnel of how much training emphasis (TE) tasks should receive in formal Forecaster training, and ratings of relative task difficulty (TD). A detailed explanation of TE and TD ratings can be found under Task Factor Administration in the SURVEY METHODOLOGY section of this report.

Samples of tasks with the highest Observer TE ratings, with accompanying percent first-job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) members performing, are listed in Table 16. As expected, tasks with the highest Observer TE ratings deal with determining various weather conditions, encoding observations, and plotting data. These tasks are performed by high percentages of criterion group members and have fairly high TD.

Samples of tasks with the highest Forecaster TE ratings, with percent second-enlistment (49-96 months TAFMS) and career (97+ months TAFMS) members performing are listed in Table 17. Tasks with the highest Forecaster TE ratings deal with analyzing weather conditions and charts, observing weather using radar, and issuing weather forecasts. These tasks also are performed by high percentages of Forecaster personnel and, for the most part, have high TD.

Most tasks with the highest TD ratings, on the other hand, deal with computer functions and are performed by very few respondents. These tasks, along with percent first-job, first- and second-enlistment, career, and 5- and 7-skill level members performing data, are listed in Table 18.

First-Enlistment AFSC 251X0 Personnel

First enlistment respondents totaled 505 Observers and 18 Forecasters. Eighty percent of the Observer respondents perform the Weather Observer job, with smaller percentages performing other jobs (Figure 2). Thirteen first-enlistment Forecaster respondents perform the Forecaster job. Representative tasks first-enlistment Observer personnel perform are listed in Table 19 and are consistent with the job they have. Equipment used by more than 30 percent of first-enlistment Observer personnel is listed in Table 20, while equipment used by more than 30 percent of Forecasters is listed in Table 21.

TABLE 16

SAMPLE OF TASKS WITH HIGHEST OBSERVER TRAINING EMPHASIS (TE) RATINGS

TASKS		TNG EMPH*	PERCENT MEMBERS PERFORMING XO 1ST JOB	XO 1ST ENL	TASK DIFF
I330	DETERMINE CEILING	7.45	82	80	4.90
I341	ENCODE OBSERVATIONS ON AWS FORMS 10 (AIRWAYS OBSERVATIONS)	7.38	74	69	5.14
I334	DETERMINE HORIZONTAL VISIBILITIES, SUCH AS PREVAILING OR SECTOR	7.21	81	80	4.98
I335	DETERMINE NUMBER AND AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	7.05	82	80	5.00
I340	DETERMINE WIND VELOCITIES AND CHARACTERISTICS	7.05	72	72	4.42
I333	DETERMINE EXISTENCE AND AMOUNT OF OBSCURATIONS	7.02	81	79	4.94
I339	DETERMINE WEATHER AND OBSTRUCTIONS TO VISIONS	7.00	82	81	4.69
F204	PERFORM PMSV CONTACTS	6.76	65	65	4.31
I342	ENCODE OBSERVATIONS ON AWS FORMS 10A/B (METAR OBSERVATIONS)	6.76	29	36	5.53
J386	PLOT SKEW-T DIAGRAMS	6.76	80	77	5.19
I325	COMPUTE RVRS	6.67	55	56	4.38
I336	DETERMINE PRECIPITATION CHARACTERISTICS	6.62	78	77	4.61
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	6.60	86	83	3.98
F180	ENCODE RADAR REPORTS (RAREPS)	6.57	47	45	4.70
I338	DETERMINE VERTICAL VISIBILITIES	6.57	65	65	5.02
I329	DETERMINE BAROMETRIC PRESSURES	6.50	62	61	3.93
J376	PLOT LOCAL AREA WORK CHARTS (LAWCs)	6.43	75	72	4.88

* Observer TE Mean = 1.50 S.D. = 1.70
TD Mean = 5.00 S.D. = 1.00

TABLE 16 (CONTINUED)

SAMPLE OF TASKS WITH HIGHEST OBSERVER TRAINING EMPHASIS (TE) RATINGS

TASKS		TNG EMPH*	PERCENT MEMBERS PERFORMING XO 1ST JOB	XO 1ST ENL	TASK DIFF
F178	DECODE WEATHER FORECASTS	6.33	64	66	4.01
M473	DETERMINE ECHO INTENSITIES	6.31	50	49	5.14
M471	DETERMINE AND ENCODE EXPLANATORY REMARKS, SUCH AS HOOKS OR MELTING LEVELS	6.28	25	28	6.44
M478	ENCODE RADAR OBSERVATIONS	6.22	48	49	5.49
I326	COMPUTE SEA LEVEL PRESSURES	6.21	74	70	4.38
I327	COMPUTE STATION PRESSURES	6.19	61	62	4.01
M475	DETERMINE ECHO TOPS	6.17	50	49	4.87
M477	DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENTS	6.17	49	49	5.46
F223	RECORD OR ENCODE PILOT REPORTS (PIREPS)	6.16	69	70	4.31
J369	PLOT AIRWAYS CODES	6.14	56	51	4.73
I332	DETERMINE DEW POINTS	6.12	78	78	3.77
I354	PERFORM BAROMETER COMPARISONS	6.10	70	73	5.48
F179	ENCODE MESSAGES	6.07	51	51	4.27
I350	MEASURE HEIGHT OF CLOUD LAYERS USING LASER BEAM CEILOMETERS (LBCs)	6.07	69	66	4.10

* Observer TE Mean = 1.50 S.D. = 1.70
TD Mean = 5.00 S.D. = 1.00

TABLE 17

SAMPLE OF TASKS WITH HIGHEST FORECASTER TRAINING EMPHASIS (TE) RATINGS

TASKS		TRAINING EMPHASIS*	PERCENT MEMBERS PERFORMING 25150A	PERCENT MEMBERS PERFORMING 25170A	TASK DIFFERENCE
L464	ANALYZE UPPER AIR CHARTS	7.42	81	62	5.67
L455	ANALYZE SEVERE WEATHER FEATURES	7.28	55	46	6.61
L453	ANALYZE SATELLITE DATA	7.25	77	62	6.44
L456	ANALYZE SKEW-T DIAGRAMS	7.19	80	58	5.98
L446	ANALYZE LAWCs	7.08	77	57	5.61
L466	ANALYZE VORTICITY CHARTS	7.08	76	58	5.66
L465	ANALYZE UPPER LEVEL WINDS	6.97	64	48	5.22
K428	PREPARE WEATHER WARNINGS	6.92	76	58	6.04
K429	PREPARE WEATHER WATCHES	6.92	55	38	5.86
H289	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER WARNINGS	6.78	78	56	5.43
K426	PREPARE WEATHER ADVISORIES	6.78	73	54	5.90
H269	BRIEF AIRCREWS	6.75	76	54	5.05
K407	PREPARE AIRCRAFT OPERATIONS FORECASTS	6.75	63	44	5.83
H288	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER ADVISORIES	6.72	78	53	5.34
L459	ANALYZE SYNOPTIC SURFACE CHARTS	6.72	57	46	5.87
K431	PROG SURFACE OR UPPER AIR FEATURES	6.69	60	47	6.01
F181	ENCODE WEATHER FORECASTS	6.61	80	61	4.49
H287	ISSUE WEATHER FORECASTS	6.58	79	59	5.45
H290	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER WATCHES	6.53	58	39	5.36
K399	AMEND WEATHER FORECASTS	6.44	80	60	5.61
M478	ENCODE RADAR OBSERVATIONS	6.39	52	36	5.49
M473	DETERMINE ECHO INTENSITIES	6.33	54	37	5.14

* Forecaster TE Mean = 1.88 S.D. = 1.64
TD Mean = 5.00 S.D. = 1.00

TABLE 17 (CONTINUED)

SAMPLE OF TASKS WITH HIGHEST FORECASTER TRAINING EMPHASIS (TE) RATINGS

TASKS		TRAINING EMPHASIS*	PERCENT MEMBERS PERFORMING 25150A	25170A	TASK DIFFERENCE
M476	DETERMINE ECHO TYPES	6.33	52	37	5.23
M477	DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENTS	6.33	54	38	5.46
M474	DETERMINE ECHO INTENSITY TRENDS	6.25	53	37	4.99
H277	COMPLETE PILOT WEATHER BRIEFING FORMS	6.22	73	51	5.01
K425	PREPARE TERMINAL FORECASTS, OTHER THAN CENTRALIZED TERMINAL	6.22	43	40	6.23
M475	DETERMINE ECHO TOPS	6.22	51	36	4.87
L457	ANALYZE STABILITY CHARTS	6.19	27	24	5.61
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	6.17	79	62	5.56
M472	DETERMINE ECHO COVERAGES	6.14	53	36	5.31
L458	ANALYZE STREAMLINE CHARTS	6.08	39	32	5.97
L461	ANALYZE THICKNESS CHARTS	6.08	66	44	5.36
F177	DECODE TELETYPE MESSAGES	6.03	84	70	4.01
L447	ANALYZE MOISTURE CHARTS	6.03	39	31	5.07

* Forecaster TE Mean = 1.88 S.D. = 1.64
TD Mean = 5.00 S.D. = 1.00

TABLE 18

SAMPLE OF TASKS WITH HIGHEST TASK DIFFICULTY (TD) RATINGS

TASKS		TASK DIFF	PERCENT MEMBERS PERFORMING				
			XO 1ST JOB	XO 1ST ENL	25150	25150A	25170A
P614	READ MEMORY AND MASS STORAGE DUMPS	9.04	0	0	1	2	2
P563	DESIGN COMPUTER SOFTWARE FOR USE WITH COMMUNICATIONS SYSTEMS	8.06	0	0	1	1	2
P625	TEST WEATHER COMPUTER SOFTWARE	8.04	1	1	3	4	7
P565	DESIGN WEATHER COMPUTER SOFTWARE FOR REAL-TIME OPERATING SYSTEMS	7.93	0	0	1	1	2
P605	PERFORM COMPUTER SOFTWARE MAINTENANCE	7.73	1	2	3	3	3
Q663	PERFORM FLARE PATROLS IN SEMIAUTOMATIC MODE	7.55	0	0	0	1	2
P566	DESIGN WEATHER COMPUTER SOFTWARE, OTHER THAN FOR REAL-TIME OPERATING SYSTEMS	7.49	0	0	0	2	3
P574	EVALUATE EFFECTIVENESS OF WEATHER COMPUTER SOFTWARE	7.39	0	0	1	3	6
P564	DESIGN DATA BASES	7.37	0	0	0	2	5
P613	PREPARE SOFTWARE SUBSYSTEM DETAILED FLOW CHARTS	7.34	0	0	0	1	2
P629	WRITE COMPUTER SOFTWARE CODES	7.34	0	0	0	3	3
D111	WRITE CDCs	7.34	0	0	0	1	0
U868	TROUBLESHOOT AWDS DEFICIENCIES OR OUTAGES	7.26	5	6	7	10	11
Q676	PREPARE EXTENDED PERIOD FORECASTS	7.21	0	0	0	1	1
Q668	PERFORM RADIO LINEARITY PROCEDURES	7.19	0	0	0	1	1
P560	CREATE COMPUTER CONTROL INSTRUCTIONS	6.97	0	1	3	4	4

TD Mean = 5.00 S.D. = 1.00

TABLE 18 (CONTINUED)

SAMPLE OF TASKS WITH HIGHEST TASK DIFFICULTY (TD) RATINGS

TASKS		TASK DIFF	PERCENT MEMBERS PERFORMING				
			XO 1ST JOB	XO 1ST ENL	25150	25150A	25170A
S741	PERFORM PMIS ON PARACHUTES	6.97	0	0	0	0	0
K422	PREPARE SEA ICE FORECASTS	6.97	0	0	0	0	0
Q675	PREPARE ELECTRON DENSITY PROFILE PREDICTIONS	6.96	0	0	0	0	0
Q688	PREPARE SOLAR GEOPHYSICAL CLIMATOLOGY REPORTS	6.96	0	0	0	0	1
K413	PREPARE ELECTRO-OPTICS FORECASTS USING TACTICAL DECISION AIDS	6.94	0	0	1	23	12
Q660	PERFORM BURST PATROLS IN SEMI-AUTOMATIC MODE	6.90	0	0	0	1	1
D95	DEVELOP TECHNICAL TRAINING COURSE CURRICULUM MATERIALS	6.88	0	0	0	0	2
P567	DETERMINE AUTHENTICITY OF RADIO-INTERCEPT STATIONS	6.84	0	0	1	0	0
P612	PREPARE SOFTWARE SUBSYSTEM BLOCK DIAGRAMS	6.76	0	0	0	1	2
P628	WRITE COMPUTER RUNSTREAMS	6.75	0	0	0	2	4
P607	PERFORM SOFTWARE PROJECT MANAGEMENT	6.74	0	0	1	2	3
P569	DETERMINE WEATHER FACTORS TO BE USED IN COMPUTER SOFTWARE	6.73	0	0	0	1	2
P610	PREPARE EXTERNAL COMPUTER SOFTWARE DOCUMENTATION	6.73	0	0	2	2	3
C53	CONDUCT STAFF ASSISTANCE VISITS	6.72	1	0	0	2	7
K415	PREPARE FORECAST STUDIES	6.71	0	0	2	29	26

TD Mean = 5.00 S.D. = 1.00

DISTRIBUTION OF FIRST-ENLISTMENT AFSC 251X0 PERSONNEL ACROSS CAREER LADDER JOBS

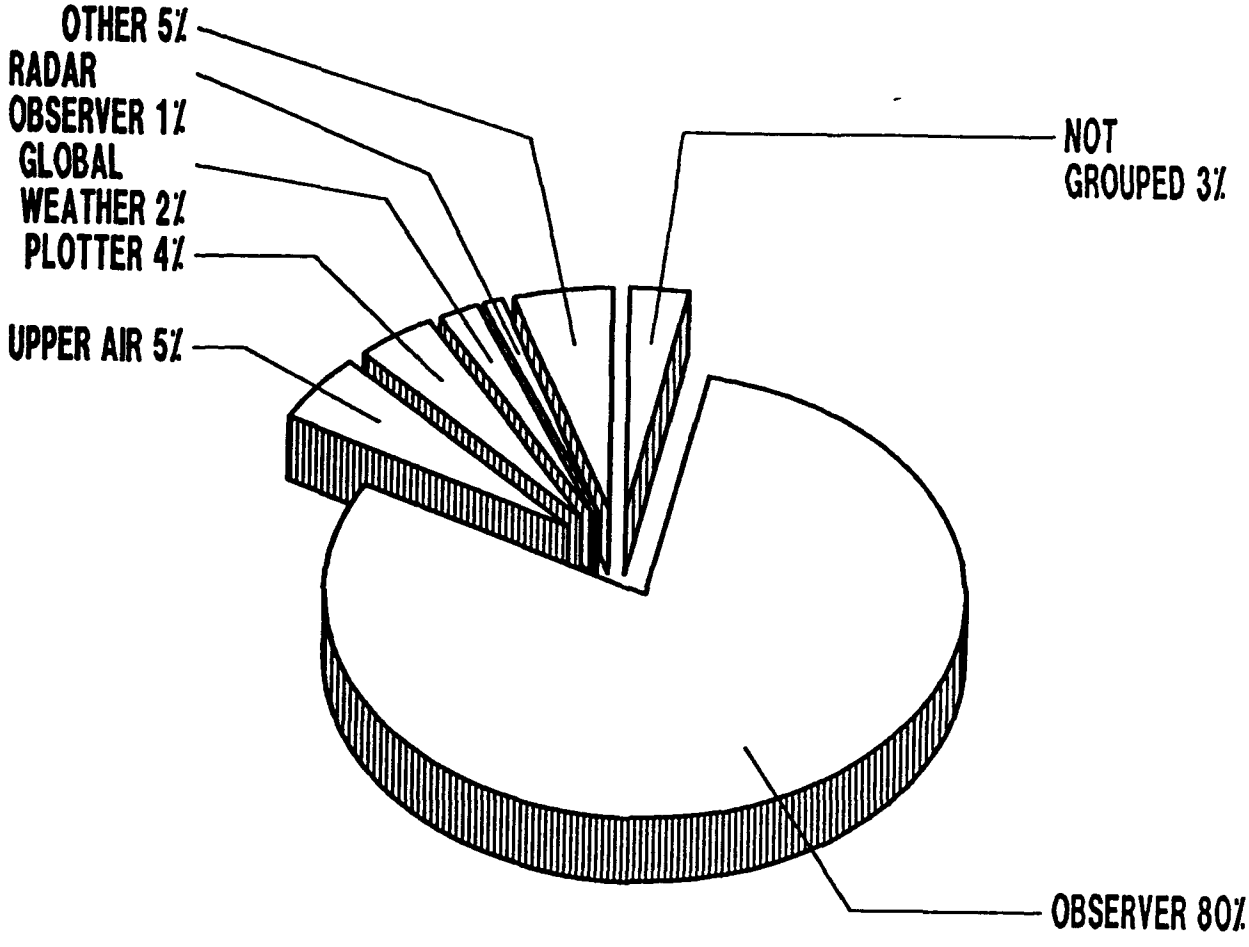


FIGURE 2

TABLE 19

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
AFSC 251X0 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=505)
F173	CLEAN WEATHER FACILITIES	91
G234	CHANGE PRINTER RIBBONS	89
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	83
I352	MEASURE PRECIPITATION	82
F188	FILE TELETYPE MESSAGES	81
I339	DETERMINE WEATHER AND OBSTRUCTIONS TO VISIONS	81
I335	DETERMINE NUMBER AND AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	80
I330	DETERMINE CEILING	80
I334	DETERMINE HORIZONTAL VISIBILITIES, SUCH AS PREVAILING OR SECTOR	80
I333	DETERMINE EXISTENCE AND AMOUNT OF OBSCURATIONS	79
I358	READ DRY AND WET BULB TEMPERATURES	79
I332	DETERMINE DEW POINTS	78
I336	DETERMINE PRECIPITATION CHARACTERISTICS	77
J386	PLOT SKEW-T DIAGRAMS	77
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	76
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	74
F187	FILE PLOTTED CHARTS OR MAPS	74
F208	POST CHARTS	73
G254	REPLACE PAPER ON TELETYPES	73
I340	DETERMINE WIND VELOCITIES AND CHARACTERISTICS	72
J376	PLOT LOCAL AREA WORK CHARTS (LAWCs)	72
I367	TEAR MAPS FROM FACSIMILE PRINTERS	71
I326	COMPUTE SEA LEVEL PRESSURES	70
B31	CONDUCT SHIFT CHANGE BRIEFINGS	70
I341	ENCODE OBSERVATIONS ON AWS FORMS 10 (AIRWAYS OBSERVATIONS)	69
F210	POST TELETYPE MESSAGES	69
G246	REPLACE FACSIMILE PAPER ROLLS	69
F195	MAKE ENTRIES IN STATION LOGS	68
I323	COMPUTE PRESSURE ALTITUDES	68
I350	MEASURE HEIGHT OF CLOUD LAYERS USING LASER BEAM CEILOMETERS (LBCs)	66
F177	DECODE TELETYPE MESSAGES	66
F185	FILE AUTOMATED FACSIMILE CHARTS	65

TABLE 20

EQUIPMENT USED BY 30 PERCENT OR MORE
OF FIRST-ENLISTMENT OBSERVER PERSONNEL
(PERCENT RESPONDING)

EQUIPMENT	1ST ENL (N=505)
SLING PSYCHROMETERS, ML-24	80
BAROMETERS, ML-658/GM DIGITAL ALTIMETER	75
RECORDERS, WIND DIRECTION AND SPEED, RO-362	73
PILOT-TO-METRO SERVICES RADIOS	71
BAROMETERS, ML-102 ANEROID	69
AMBIENT TEMPERATURE AND DEWPOINT MEASUREMENT SETS AN/FMQ-8	63
CEILOMETERS, LASER BEAM (LBC), AN/GMQ-34	63
CALCULATORS, CO-402/UM PRESSURE REDUCTION	60
PRECIPITATION MEASURING EQUIPMENT	60
CALCULATORS, ML-429/UM PSYCHROMETRIC	58
BELT WEATHER KITS	55
TELETYPE TERMINALS (SEND/RECEIVE), AFMEDS	51
TRANSMISSIOMETER AN/GMQ-10/32	48
BAROMETER, TACTICAL ANEROID	46
WEATHER OBSERVING KITS	46
WIND SETS, AN/GMR 11/13/20	46
SIMS ANEMOMETERS	45
RADAR SETS, AN/FPS-77	42
RADARS, DIAL-UP, ALDEN, KAVOUROS, TRINITON	39
METEOROLOGICAL SETS	34
CEILOMETERS, PORTABLE LASER, AN/GMQ-33	32
BACKUP GENERATORS	31
COMPUTERS, RUNWAY VISUAL RANGE, FMN-1	30

TABLE 21

EQUIPMENT USED BY 30 PERCENT OR MORE
OF AFSC 25170A FORECASTER PERSONNEL
(PERCENT RESPONDING)

EQUIPMENT	25170A (N=411)
PILOT-TO-METRO SERVICES RADIOS	50
SIMS ANEMOMETERS	45
TELETYPE TERMINALS (SEND/RECEIVE), AFMEDS	42
BAROMETERS, ML-658/GM DIGITAL ALTIMETER	41
SLING PSYCHROMETERS, ML-24	40
BELT WEATHER KITS	37
RECORDERS, WIND DIRECTION AND SPEED, RO-362	37
ANIMATION DISPLAY SYSTEMS	35
BAROMETERS, ML-102 ANEROID	35
REDUCTION COPIERS	35
ALDEN MINIFAXES, 9315R,T/R,TRT	34
RECORDERS, WEATHER FACSIMILE	34
CEILOMETERS, LASER BEAM (LBC), AN/GMQ-34	33
AMBIENT TEMPERATURE AND DEWPOINT MEASUREMENT SETS AN/FMQ-8	32
CALCULATORS, CO-402/UM PRESSURE REDUCTION	32
CALCULATORS, ML-429/UM PSYCHROMETRIC	32
BAROMETER, TACTICAL ANEROID	31
RADARS, DIAL-UP, ALDEN, KAVOUROS, TRINITON	31
PRECIPITATION MEASURING EQUIPMENT	30

AFSC 251X0 Specialty Training Standard

For the purposes of reviewing training documents for the Weather career ladder, USAFOMS personnel met with 3330th Technical Training Group personnel at Chanute AFB and matched tasks listed in the job inventory to sections and subsections of the Specialty Training Standard (STS) and to learning objectives of the qualification, 3-skill level awarding, and 7-skill level awarding Plans of Instruction (POI). Listings of the STS and POIs were then produced, showing tasks matched, percent members performing the tasks, and TE and TD ratings for each matched task. These listings are included in the Training Extracts sent to the school for review. Criteria set forth in AFR 8-13, AFR 8-13/ATC Supplement 1 (Attachment 1, paragraph A1-3c(4)), and ATCR 52-22 Attachment 1, were used to review the relevance of each STS element that had inventory tasks matched to it. Any element with matched tasks performed by 20 percent or more first-job, first-enlistment, 5-, or 7-skill level A-shred members is considered to be supported and should be part of the STS.

AFSC 251X0 STS. Paragraphs 1 through 7 deal with general topics of career ladder progression, security, AFOSH, weather station operations and administration, graduate evaluation, supervision, and training and were not reviewed. Paragraphs 8 through 23 cover the technical aspects of the career ladder and include 175 individual line items, 132 of which have tasks matched.

Using standard ATC criteria and percentages of first-job, first-enlistment, 5-level Observer, second-enlistment, 5-level Forecaster, and 7-skill level members performing matched tasks, most line items are supported by survey data. Unsupported portions of the STS are line items 11b(9) - Plot satellite bulletins, 12c - determine wind direction and speed from vector diagrams, 20b(4) - Operate telephone answering devices, all of paragraph 21 - Space Environment Support System, and all of paragraph 22 - AWDS. Unsupported line items with tasks matched and survey data are listed in Appendix B, Table B1. Functional managers need to review these line items to determine if they need to remain in the STS.

There are several technical tasks with high TE, performed by more than 20 percent of criterion group members, which are not matched to the STS (see Table 22). About half deal with Forecaster functions. Functional managers should also review these to determine if they suggest topics that need to be included in the STS.

Plans of Instruction

The same 3330 TCHTG personnel matched inventory tasks to learning objectives of the AQR25130 Plan of Instruction (POI) - dated July 1990, ABR25130 POI - dated November 1991, and AAR25170 POI - dated October 1991. Computer products were created for the POIs, listing each learning objective, tasks matched, TE and TD ratings, ATI, and percentages of appropriate TAFMS or skill-level members performing the tasks. Learning objectives with tasks matched were reviewed using criteria found in ATCR 52-22, Attachment 1 (February 1989). Any objectives having matched tasks performed by 30 percent or more first-job, first-enlistment, or 7-skill level members (for the

TABLE 22

TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE PERSONNEL
AND NOT REFERENCED TO THE STS

TASKS		OBS TNG EMP*	PERCENT MEMBERS PERFORMING 1ST JOB	1ST ENL	251 50	251 50A	251 70A	FOR TNG EMP**
F182	EVALUATE MISSION IMPACT OF EQUIPMENT OUTAGES	5.22	66	66	62	66	61	4.08
F183	EXTRACT INFORMATION FROM LUNAR TABLES	3.53	14	18	27	64	45	3.72
F184	EXTRACT INFORMATION FROM SOLAR TABLES	3.62	17	22	31	68	52	3.36
F205	PERFORM POWER-UP OR POWER-DOWN PROCEDURES	5.34	47	51	59	63	50	3.69
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	3.84	72	74	74	68	49	2.62
F229	TROUBLESHOOT WEATHER COMMUNICATIONS EQUIPMENT OUTAGES	3.98	34	36	46	40	44	2.47
I311	ANNOTATE RECORDING INSTRUMENT CHARTS	3.78	72	71	68	41	29	1.19
K401	COMPUTE WIND FACTORS	.62	0	0	0	26	17	4.28
K403	DECODE COMPUTER FLIGHT PLANS	.57	1	1	2	28	20	4.25
K405	EXTRACT INFORMATION FROM SENSIBLE WEATHER PLOTS	1.53	0	1	2	41	30	3.72
K432	VERIFY DATA USED IN PREPARATION OF WEATHER FORECASTS	.59	3	2	4	58	47	4.81
K433	VERIFY FORECASTS	1.31	1	2	5	78	63	5.31
K434	VERIFY WATCHES	1.62	1	2	4	54	40	5.50
K435	VERIFY WEATHER ADVISORIES	1.93	8	11	14	73	56	5.78
K436	VERIFY WEATHER WARNINGS	1.60	2	3	5	51	39	5.50
L450	ANALYZE RADAR CHARTS	1.55	1	2	4	38	31	5.28
L454	ANALYZE SENSIBLE WEATHER PLOTS	1.22	0	0	1	40	29	5.19
M483	PERFORM DIAL-UP RADAR PROCEDURES	4.10	32	30	30	42	31	4.00

* Observer TE Mean = 1.50 S.D. = 1.70
** Forecaster TE Mean = 1.88 S.D. = 1.64

advanced course) are considered to be supported and should be part of the respective courses. Objectives with matched tasks performed by less than 30 percent of the criterion groups may be more appropriate for OJT.

AQR25130 POI. The qualification course includes 33 learning objectives dealing with basic meteorology, types of observations, plotting data, and transmitting information with a COMEDS workstation. Twenty-four of these objectives have tasks matched, and 23 of the 24 are well supported by survey data. Only objective 1I2d, Compute an air-mass sounding analysis from a plotted skew-T diagram, is unsupported. This objective, with accompanying survey data, is listed in Table 23.

ABR25130 POI. The skill-level awarding course includes 45 learning objectives dealing with weather knowledge, operating weather measuring equipment, operating a weather station, making weather observations, and using the Automated Weather Distribution system (AWDS). Thirty-six of these objectives have tasks matched and 23 are supported. Five objectives in Block I4 - Weather Station Operations (WSO) Lab and most objectives in Block I8 - Automated Weather Distribution System (AWDS) are not supported. These unsupported learning objectives with accompanying survey data are presented in Appendix B, Table B2. The percent members performing AWDS tasks is low because the equipment was not in place at the time of the survey. School personnel need to review the other unsupported objectives to determine if they are appropriate for the entry-level POI.

There are a number of technical tasks performed by high percentages of first-job or first-enlistment Observer personnel that have high TE and are not matched to POI objectives. A sample of these tasks is contained in Table 24. School personnel need to review these tasks to determine if they suggest topics which should be included in the POI.

AAR25170 POI. The Weather Technician course prepares graduates to perform Forecaster duties. The curriculum includes atmospheric physics and dynamics, practice performing various analyses using information from a number of sources, and making forecasts. Forty-one of the eighty-seven technical objectives have tasks matched, and all 41 are supported by survey data.

Tasks listed in Table 25 have high TE, are performed by more than 30 percent of Forecaster personnel, but are not matched to learning objectives in the 7-skill level course. School personnel need to review these tasks to determine if they are steps or subtasks, or if they suggest topics that should be included in the course.

Summary

Most of the STS and POIs are supported by survey data. There are some individual line items and learning objectives which need to be reviewed, as well as tasks not matched to the training documents.

TABLE 23

UNSUPPORTED AQR25030 POI LEARNING OBJECTIVE

OBJECTIVE	TNG EMPH*	PERCENT MEMBERS PERFORMING XO 1ST JOB	PERCENT MEMBERS PERFORMING XO 1ST ENL	TASK DIFF	ATI
II2d. GIVEN A PLOTTED SKEW-T DIAGRAM, COMPUTER AN AIR-MASS SOUNDING ANALYSIS					
L449 ANALYZE PHYSICAL CHARACTERISTICS OF AIR MASSES	1.19	0	0	5.74	2
L457 ANALYZE STABILITY CHARTS	1.02	0	0	5.61	2
L465 ANALYZE UPPER LEVEL WINDS	1.36	2	3	5.22	2

* Observer TE Mean = 1.50 S.D. = 1.70
TD Mean = 5.00 S.D. = 1.00

TABLE 24

TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE OBSERVER PERSONNEL AND NOT REFERENCED TO ABR25130 POI

TASKS		TNG EMPH*	PERCENT MEMBERS PERFORMING XO 1ST JOB	XO 1ST ENL	TASK DIFF	ATI
F177	DECODE TELETYPE MESSAGES	6.05	68	66	4.01	18
F178	DECODE WEATHER FORECASTS	6.33	64	66	4.01	18
F180	ENCODE RADAR REPORTS (RAREPS)	6.57	47	45	4.70	12
F182	EVALUATE MISSION IMPACT OF EQUIPMENT OUTAGES	5.22	66	66	4.31	18
F185	FILE AUTOMATED FACSIMILE CHARTS	3.31	69	65	2.64	13
F186	FILE LOCAL WEATHER DISSEMINATION SYSTEM DATA	3.50	58	58	2.84	13
F187	FILE PLOTTED CHARTS OR MAPS	3.57	75	74	2.54	13
F188	FILE TELETYPE MESSAGES	3.50	81	81	2.54	13
F205	PERFORM POWER-UP OR POWER-DOWN PROCEDURES	5.34	47	51	3.74	18
F229	TROUBLESHOOT WEATHER COMMUNICATIONS EQUIPMENT OUTAGES	3.98	34	36	4.88	12
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	6.60	86	83	3.98	18
I341	ENCODE OBSERVATIONS ON AWS FORMS 10 (AIRWAYS OBSERVATIONS)	7.38	74	69	5.14	18
J381	PLOT POSITION OF TROPICAL STORMS	4.21	31	30	4.19	12
J386	PLOT SKEW-T DIAGRAMS	6.76	80	77	5.19	18
M472	DETERMINE ECHO COVERAGES	5.93	49	49	5.31	12
M473	DETERMINE ECHO INTENSITIES	6.31	50	49	5.14	12
M474	DETERMINE ECHO INTENSITY TRENDS	6.05	44	45	4.99	12
M475	DETERMINE ECHO TOPS	6.17	50	49	4.87	12
M476	DETERMINE ECHO TYPES	6.05	45	46	5.23	12
M477	DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENTS	6.17	49	49	5.46	12
M478	ENCODE RADAR OBSERVATIONS	6.22	48	49	5.49	12
M479	LOG GROUND TARGET CHECKS	5.12	34	35	4.33	12
M480	LOG RADAR OBSERVATIONS	5.76	42	43	4.60	12
M483	PERFORM DIAL-UP RADAR PROCEDURES	4.10	32	30	5.14	12
M484	PERFORM RADAR OPERATIONAL CHECKS	5.33	29	30	5.03	12
M486	PERFORM RADAR TURN-ON OR TURN-OFF PROCEDURES	5.43	42	42	4.38	12

* Observer TE Mean = 1.50 S.D. = 1.70
TD Mean = 5.00 S.D. = 1.00

TABLE 25

TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE
FORECASTER PERSONNEL NOT MATCHED TO THE ABR25170 POI

TASKS		TNG EMPH*	PERCENT MEMBERS PERFORMING 25170	TASK DIFF	ATI
F180	ENCODE RADAR REPORTS (RAREPS)	5.83	37	4.70	12
F182	EVALUATE MISSION IMPACT OF EQUIPMENT OUTAGES	4.08	61	4.31	18
F183	EXTRACT INFORMATION FROM LUNAR TABLES	3.72	45	4.66	12
F207	PERFORM TOXIC CORRIDOR CALCULATIONS	5.17	43	5.47	12
H279	DISSEMINATE WEATHER INFORMATION USING LWDSs	3.86	36	3.87	12
H299	TRANSMIT PIREPS	3.94	47	3.95	12
H305	TRANSMIT WEATHER ADVISORIES, WARNINGS, OR WATCHES	4.50	54	4.28	18
I323	COMPUTE PRESSURE ALTITUDES	4.42	39	4.13	12
I326	COMPUTE SEA LEVEL PRESSURES	3.56	30	4.38	12
I327	COMPUTE STATION PRESSURES	3.75	30	4.01	12
I333	DETERMINE EXISTENCE AND AMOUNT OF OBSCURATIONS	3.81	36	4.94	12
I334	DETERMINE HORIZONTAL VISIBILITIES, SUCH AS PREVAILING OR SECTOR	3.83	36	4.98	12
I335	DETERMINE NUMBER AND AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	3.89	36	5.00	12
I336	DETERMINE PRECIPITATION CHARACTERISTICS	3.64	35	4.61	12
I338	DETERMINE VERTICAL VISIBILITIES	3.69	32	5.02	12

* Forecaster TE Mean = 1.88 S.D. = 1.64
TD Mean = 5.00 S.D. = 1.00

TABLE 25 (CONTINUED)

TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE
FORECASTER PERSONNEL NOT MATCHED TO THE ABR25170 POI

TASKS		TNG EMPH*	PERCENT MEMBERS PERFORMING 25170	TASK DIFF	ATI
I340	DETERMINE WIND VELOCITIES AND CHARACTERISTICS	3.78	36	4.42	12
J376	PLOT LOCAL AREA WORK CHARTS (LAWCs)	3.78	37	4.88	12
J386	PLOT SKEW-T DIAGRAMS	4.08	37	5.19	12
K399	AMEND WEATHER FORECASTS	6.44	60	5.61	18
K405	EXTRACT INFORMATION FROM SENSIBLE WEATHER PLOTS	3.72	30	4.38	12
K432	VERIFY DATA USED IN PREPARATION OF WEATHER FORECASTS	4.81	47	5.32	12
K433	VERIFY FORECASTS	5.31	63	4.83	18
K434	VERIFY WATCHES	5.50	40	4.75	12
K435	VERIFY WEATHER ADVISORIES	5.78	56	4.70	18
K436	VERIFY WEATHER WARNINGS	5.50	39	4.68	12
M478	ENCODE RADAR OBSERVATIONS	6.39	36	5.49	12
M479	LOG GROUND TARGET CHECKS	3.92	32	4.33	12
M480	LOG RADAR OBSERVATIONS	5.11	34	4.60	12
M483	PERFORM DIAL-UP RADAR PROCEDURES	4.00	31	5.14	12
M484	PERFORM RADAR OPERATIONAL CHECKS	4.36	31	5.03	12
M486	PERFORM RADAR TURN-ON OR TURN-OFF PROCEDURES	4.22	32	4.38	12

* Forecaster TE Mean = 1.88 S.D. = 1.64
TD Mean = 5.00 S.D. = 1.00

JOB SATISFACTION

Respondents were asked to indicate how interested they are in their jobs, if they feel their talents and training are being used, and if they intend to reenlist. Satisfaction indicators for TAFMS groups in the present study were compared to personnel in six similar direct support AFSCs surveyed in 1991 (see Table 26).

Satisfaction indicators for Weather personnel are quite similar to those of members of the related AFSCs surveyed last year. Reenlistment intentions, however, are somewhat lower for first- and second-enlistment Weather personnel.

Job satisfaction indicators are also quite similar for the current and previous studies (see Table 27). Reenlistment intentions are somewhat lower for first-enlistment personnel in the current study.

Satisfaction indicators for members performing the various jobs are shown in Table 28. Overall, Forecaster personnel have higher satisfaction indicators than Observers, as shown by indicators for the various jobs. The seven personnel performing the Data Controller job have the lowest overall indicators, probably due to the few technical tasks they perform. Observer personnel with the Global Weather and Data Monitor jobs also find their job dull and feel their talents and training are not used.

Personnel performing the Duty Forecaster job have the lowest Forecaster job satisfaction indicators. While only half find their job interesting, most feel their talents and training are used. Forecasters performing the Severe Weather job have the highest overall indicators.

Summary

Overall satisfaction indicators of Weather personnel are about the same as those of members of related AFSCs surveyed in 1991 and are similar to those reported in the 1988 OSR. Generally, Forecaster personnel enjoy their work more and feel their talents and training are used more than Observer personnel do. Lowest overall satisfaction is expressed by Observer personnel performing the Data Controller job, while the highest is reported by Forecaster personnel with the Severe Weather Forecasting job.

TABLE 26

COMPARISON OF JOB SATISFACTION INDICATORS FOR 251X0 TAFMS GROUPS
IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	251X0/A (N=523)	COMP SAMPLE (N=2,080)	251X0/A (N=278)	COMP SAMPLE (N=1,191)	251X0/A (N=803)	COMP SAMPLE (N=1,790)
EXPRESSED JOB INTEREST:						
INTERESTING	64	69	73	75	79	76
SO-SO	18	18	14	16	12	15
DULL	18	13	13	9	9	9
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	68	78	80	80	85	83
LITTLE OR NOT AT ALL	32	22	20	2	15	17
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	86	81	86	8	82	80
LITTLE OR NOT AT ALL	14	19	14	2	18	20
REENLISTMENT INTENTIONS:						
WILL REENLIST	49	56	63	80	74	76
WILL NOT REENLIST	49	44	37	19	9	6
WILL RETIRE	0	0	0	1	17	17

COMPARATIVE DATA ARE FROM THE FOLLOWING SIX RELATED AFSCs SURVEYED IN 1991:

551X0 - PAVEMENTS MAINTENANCE
551X1 - CONSTRUCTION EQUIPMENT
552X0 - STRUCTURAL
612X0 - MEATCUTTER
612X1 - SUBSISTENCE OPERATIONS
753X0 - COMBAT ARMS TRAINING AND MAINTENANCE

TABLE 27

COMPARISON OF JOB SATISFACTION INDICATORS FOR 251X0 TAFMS GROUPS
IN CURRENT AND PREVIOUS STUDY
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	CURRENT (N=523)	1988 (N=487)	CURRENT (N=278)	1988 (N=584)	CURRENT (N=803)	1988 (N=942)
EXPRESSED JOB INTEREST:						
INTERESTING	64	68	73	74	79	83
SO-SO	18	16	14	13	12	10
DULL	18	15	13	13	9	6
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	68	71	80	77	85	85
LITTLE OR NOT AT ALL	32	29	20	22	15	14
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	86	79	86	84	82	83
LITTLE OR NOT AT ALL	14	21	14	16	18	16
REENLISTMENT INTENTIONS:						
WILL REENLIST	49	60	63	68	74	78
WILL NOT REENLIST	49	40	37	32	9	9
WILL RETIRE	0	0	0	0	17	12

TABLE 28

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 251X0
RESPONDENTS ACROSS JOBS
(PERCENT MEMBERS RESPONDING)

	WEATHER OBSERVER (N=516)	WEATHER FORE-CASTER (N=665)	ANALYSIS (N=28)	SPACE ENVM (N=25)	RADAR OBSERVER (N=10	PLOTTER (N=22)	WEATHER CENTRAL OBSERVER (N=8)
EXPRESSED JOB INTEREST:							
INTERESTING	66	84	61	84	40	55	25
SO-SO	18	10	21	8	30	18	25
DULL	16	6	18	8	30	27	50
PERCEIVED USE OF TALENTS:							
FAIRLY WELL TO GOOD	73	91	79	80	50	50	37
LITTLE OR NOT AT ALL	27	9	21	20	50	50	63
PERCEIVED USE OF TRAINING:							
FAIRLY WELL TO GOOD	95	95	82	60	50	55	12
LITTLE TO NOT AT ALL	5	5	18	40	50	45	88
REENLISTMENT INTENTIONS:							
WILL REENLIST	52	76	64	72	40	60	12
WILL NOT REENLIST	47	15	14	8	60	41	88
WILL RETIRE	0	9	18	20	0	0	0

TABLE 28 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 251X0
RESPONDENTS ACROSS JOBS
(PERCENT MEMBERS RESPONDING)

	GLOBAL WEATHER OBSERVER (N=11)	SEVERE WEATHER OBSERVER (N=21)	CONTG SUPPORT (N=25	DUTY FORECASTER (N=25)	METWATCH OBSERVER (N=9)	AWD SYS MANAGER (N=11)
EXPRESSED JOB INTEREST:						
INTERESTING	9	95	64	43	80	64
SO-SO	36	5	24	7	20	36
DULL	55	0	12	50	0	0
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	9	100	68	64	60	82
LITTLE OR NOT AT ALL	91	0	32	36	40	18
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	0	100	84	71	100	91
LITTLE TO NOT AT ALL	100	0	16	29	0	9
REENLISTMENT INTENTIONS:						
WILL REENLIST	36	76	76	71	60	64
WILL NOT REENLIST	64	0	16	7	40	9
WILL RETIRE	0	24	8	21	0	27

TABLE 28 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 251X0
RESPONDENTS ACROSS JOBS
(PERCENT MEMBERS RESPONDING)

	UPPER AIR OBSERVER (N=27)	MANAGER (N=18)	SUPERVISOR (N=123)	DATA PROCESS (N=29)	DATA MONITOR (N=6)	DATA CONTROLLER (N=7)
EXPRESSED JOB INTEREST:						
INTERESTING	66	72	76	83	17	0
SO-SO	19	17	12	7	33	14
DULL	15	11	11	10	50	86
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO GOOD	81	67	83	69	33	0
LITTLE OR NOT AT ALL	19	33	17	31	67	100
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO GOOD	70	44	68	21	67	0
LITTLE TO NOT AT ALL	30	56	32	79	33	100
REENLISTMENT INTENTIONS:						
WILL REENLIST	48	33	54	66	33	29
WILL NOT REENLIST	52	6	8	10	67	71
WILL RETIRE	0	61	38	24	0	0

DISCUSSION

Career ladder progression is from more technical observer functions performed by 3- and 5-skill level members in their first enlistment to more complex analytical forecasting functions performed by more senior airmen who have attended the 7-skill level awarding course. Seven-skill level members also perform some first-line supervisory responsibilities. These duties are consistent with the present classification structure as described by the AFR 39-1 Specialty Descriptions and appear to be a logical progression for weather personnel to take in their careers.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS

TABLE A1

WEATHER OBSERVER
(STG132)

NUMBER IN GROUP: 516
PERCENT OF SAMPLE: 31%
PERCENT SUPERVISING: 1%

AVERAGE TIME IN JOB: 21 MONTHS
AVERAGE TAFMS: 34 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 162

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
I352	MEASURE PRECIPITATION	98
I339	DETERMINE WEATHER AND OBSTRUCTIONS TO VISIONS	97
I334	DETERMINE HORIZONTAL VISIBILITIES, SUCH AS PREVAILING OR SECTOR	97
I335	DETERMINE NUMBER AND AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	96
I330	DETERMINE CEILING	96
I333	DETERMINE EXISTENCE AND AMOUNT OF OBSCURATIONS	96
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	94
I336	DETERMINE PRECIPITATION CHARACTERISTICS	94
I332	DETERMINE DEW POINTS	92
I358	READ DRY AND WET BULB TEMPERATURES	92
F226	REPRODUCE WEATHER CHARTS	89
I340	DETERMINE WIND VELOCITIES AND CHARACTERISTICS	87
F188	FILE TELETYPE MESSAGES	85
I311	ANNOTATE RECORDING INSTRUMENT CHARTS	85
J386	PLOT SKEW-T DIAGRAMS	84
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	83
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	82
I326	COMPUTE SEA LEVEL PRESSURES	82
J376	PLOT LOCAL AREA WORK CHARTS (LAWCs)	82
I350	MEASURE HEIGHT OF CLOUD LAYERS USING LASER BEAM CEILOMETERS (LBCs)	81
I323	COMPUTE PRESSURE ALTITUDES	80
F187	FILE PLOTTED CHARTS OR MAPS	80
I338	DETERMINE VERTICAL VISIBILITIES	80
I341	ENCODE OBSERVATIONS ON AWS FORMS 10 (AIRWAYS OBSERVATIONS)	79
I367	TEAR MAPS FROM FACSIMILE PRINTERS	79
F208	POST CHARTS	78
I309	ADVISE AIR TRAFFIC CONTROLLERS (ATC) ON WEATHER CONDITIONS	78
F210	POST TELETYPE MESSAGES	77
I316	COMPUTE ALTIMETER SETTINGS	77
I329	DETERMINE BAROMETRIC PRESSURES	74
F185	FILE AUTOMATED FACSIMILE CHARTS	72

TABLE A2

WEATHER FORECASTER
(STG156)

NUMBER IN GROUP: 665
PERCENT OF SAMPLE: 40%
PERCENT SUPERVISING: 75%

AVERAGE TIME IN JOB: 34 MONTHS
AVERAGE TAFMS: 136 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 186

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
F178	DECODE WEATHER FORECASTS	97
H288	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER ADVISORIES	97
H289	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER WARNINGS	97
F181	ENCODE WEATHER FORECASTS	96
K399	AMEND WEATHER FORECASTS	96
K428	PREPARE WEATHER WARNINGS	96
H269	BRIEF AIRCREWS	95
F177	DECODE TELETYPE MESSAGES	95
F176	DECODE FORECAST BULLETINS	95
L446	ANALYZE LAWCs	95
H287	ISSUE WEATHER FORECASTS	94
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	94
L456	ANALYZE SKEW-T DIAGRAMS	94
K435	VERIFY WEATHER ADVISORIES	94
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	94
L464	ANALYZE UPPER AIR CHARTS	93
K426	PREPARE WEATHER ADVISORIES	93
K433	VERIFY FORECASTS	93
F223	RECORD OR ENCODE PILOT REPORTS (PIREPs)	93
H277	COMPLETE PILOT WEATHER BRIEFING FORMS	92
F204	PERFORM PMSV CONTACTS	91
F203	PERFORM PILOT-TO-METRO SERVICE (PMSV) RADIO CHECKS	90
L453	ANALYZE SATELLITE DATA	87
L466	ANALYZE VORTICITY CHARTS	87
H305	TRANSMIT WEATHER ADVISORIES, WARNINGS, OR WATCHES	87
B31	CONDUCT SHIFT CHANGE BRIEFINGS	86
H274	BRIEF NONWEATHER PERSONNEL	84
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	83
L469	REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	79
F179	ENCODE MESSAGES	79
K407	PREPARE AIRCRAFT OPERATIONS FORECASTS	76
F214	PREPARE DAILY WEATHER MAPS	75
F206	PERFORM QUALITY ASSURANCE PROCEDURES	74
K431	PROG SURFACE OR UPPER AIR FEATURES	72

TABLE A3

ANALYSIS
(STG062)

NUMBER IN GROUP: 28
PERCENT OF SAMPLE: 2%
PERCENT SUPERVISING: 32%

AVERAGE TIME IN JOB: 23 MONTHS
AVERAGE TAFMS: 148 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 35

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
L459	ANALYZE SYNOPTIC SURFACE CHARTS	96
L453	ANALYZE SATELLITE DATA	75
L466	ANALYZE VORTICITY CHARTS	75
L461	ANALYZE THICKNESS CHARTS	68
F177	DECODE TELETYPE MESSAGES	68
L465	ANALYZE UPPER LEVEL WINDS	64
L454	ANALYZE SENSIBLE WEATHER PLOTS	64
B31	CONDUCT SHIFT CHANGE BRIEFINGS	64
F178	DECODE WEATHER FORECASTS	61
F176	DECODE FORECAST BULLETINS	61
F173	CLEAN WEATHER FACILITIES	61
L460	ANALYZE TEMPERATURE CHARTS	57
F214	PREPARE DAILY WEATHER MAPS	54
L464	ANALYZE UPPER AIR CHARTS	54
F221	PRODUCE FACSIMILE PRODUCTS	50
F194	LABEL WEATHER MAPS AND CHARTS FOR FACSIMILE NETWORK TRANSMISSIONS	50
F195	MAKE ENTRIES IN STATION LOGS	46
L442	ANALYZE CONTINUITY DATA	43
H306	TRANSMIT WEATHER MAPS OR CHARTS ON WEATHER FACSIMILE NETWORKS	43
F206	PERFORM QUALITY ASSURANCE PROCEDURES	43
F213	PREPARE CLOUD COVER CHARTS	39
L458	ANALYZE STREAMLINE CHARTS	39
K431	PROG SURFACE OR UPPER AIR FEATURES	39
L468	INITIALIZE NUMERICAL WEATHER PRODUCTS (NWPs)	39
F179	ENCODE MESSAGES	39
L447	ANALYZE MOISTURE CHARTS	39
K418	PREPARE MASTER FACSIMILE CHARTS	36
L463	ANALYZE TROPICAL CYCLONES FROM SATELLITE DATA	36
K433	VERIFY FORECASTS	36
L445	ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	32
K405	EXTRACT INFORMATION FROM SENSIBLE WEATHER PLOTS	29
L440	ANALYZE CLOUD COVER CHARTS	29
L449	ANALYZE PHYSICAL CHARACTERISTICS OF AIR MASSES	25

TABLE A4

SPACE ENVIRONMENT
(STG040)

NUMBER IN GROUP: 25
PERCENT OF SAMPLE: 1%
PERCENT SUPERVISING: 52%

AVERAGE TIME IN JOB: 27 MONTHS
AVERAGE TAFMS: 148 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 85

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
Q707	TRANSMIT EVENT NOTIFICATIONS	88
B31	CONDUCT SHIFT CHANGE BRIEFINGS	88
F173	CLEAN WEATHER FACILITIES	80
F188	FILE TELETYPE MESSAGES	76
F193	INITIATE, ANNOTATE, OR COMPLETE AWS FORMS 42 (WEATHER EQUIPMENT/COMMUNICATIONS SERVICE RECORD)	76
F177	DECODE TELETYPE MESSAGES	72
Q658	MONITOR ASTROGEOPHYSICAL DATA BASES	72
D86	CONDUCT OJT	72
Q709	TRANSMIT SOLAR OPTICAL REPORTS	68
Q632	ANALYZE AND REPORT SOLAR FLARES	68
F195	MAKE ENTRIES IN STATION LOGS	68
Q664	PERFORM H ALPHA ANALYSIS	64
Q636	ANALYZE RADIO BURST SPECTRUM DATA	64
Q650	EDIT ASTROGEOPHYSICAL DATA BASES	64
Q651	EDIT SOLAR GEOPHYSICAL ACTIVITY SUMMARIES	64
Q669	PERFORM SOLAR ACQUISITION PROCEDURES	64
F206	PERFORM QUALITY ASSURANCE PROCEDURES	64
Q670	PERFORM SOLAR PRESUNRISE PROCEDURES	64
Q662	PERFORM FLARE PATROLS IN AUTOMATIC MODE	60
F179	ENCODE MESSAGES	60
Q638	ANNOTATE DAILY ACTIVITIES LOG FORMS	60
Q672	PERFORM WHITE LIGHT ANALYSIS	60
Q671	PERFORM SOLAR SPECTROGRAPHIC ANALYSIS	60
Q633	ANALYZE AURORAL FILMS	60
Q667	PERFORM OPTICAL END-OF-DAY TELESCOPE SHUTDOWNS	60
Q637	ANALYZE RADIO FREQUENCY INTERFERENCES (RFIs)	56
B27	COMPILE DATA FOR REPORTS	56
Q654	INTERPRET AND RECORD DATA FROM FIXED FREQUENCY RADIOMETERS	52
Q655	INTERPRET AND RECORD DATA FROM SFIRs	52
Q639	ANNOTATE SOLAR ANALYSIS CHART FORMS	52
Q710	TRANSMIT SOLAR RADIO REPORTS	52
Q634	ANALYZE GEOMAGNETIC DATA	48
Q659	PERFORM BURST PATROLS IN AUTOMATIC MODE	44
Q648	CLASSIFY SOLAR BURST PARAMETERS	44
Q693	PREPARE 3-HOUR GEOMAGNETIC (GEMAG) INDEXES	40

TABLE A5

RADAR OBSERVER
(GRP196)

NUMBER IN GROUP: 10
PERCENT OF SAMPLE: Less than 1%
PERCENT SUPERVISING: 0

AVERAGE TIME IN JOB: 17 MONTHS
AVERAGE TAFMS: 51 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 51

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
M473	DETERMINE ECHO INTENSITIES	100
M475	DETERMINE ECHO TOPS	100
M477	DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENTS	100
F188	FILE TELETYPE MESSAGES	100
F208	POST CHARTS	90
M474	DETERMINE ECHO INTENSITY TRENDS	90
M480	LOG RADAR OBSERVATIONS	90
M472	DETERMINE ECHO COVERAGES	90
M478	ENCODE RADAR OBSERVATIONS	90
F187	FILE PLOTTED CHARTS OR MAPS	90
M488	POST RADAR DATA, SUCH AS FREEZING LEVELS OR TROPOPAUSE	90
M476	DETERMINE ECHO TYPES	80
F185	FILE AUTOMATED FACSIMILE CHARTS	80
H300	TRANSMIT RAREPs	80
G246	REPLACE FACSIMILE PAPER ROLLS	80
G254	REPLACE PAPER ON TELETYPES	80
I367	TEAR MAPS FROM FACSIMILE PRINTERS	70
J386	PLOT SKEW-T DIAGRAMS	70
F180	ENCODE RADAR REPORTS (RAREPS)	70
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	70
G256	REPLACE PAPER OR INK CARTRIDGES ON PRINTERS	70
G234	CHANGE PRINTER RIBBONS	70
M484	PERFORM RADAR OPERATIONAL CHECKS	70
F214	PREPARE DAILY WEATHER MAPS	60
F210	POST TELETYPE MESSAGES	60
J397	TRACE SKEW-T DIAGRAMS	60
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	60
F195	MAKE ENTRIES IN STATION LOGS	60
F204	PERFORM PMSV CONTACTS	60
F186	FILE LOCAL WEATHER DISSEMINATION SYSTEM (LWDS) DATA	60
F220	PROCESS FACSIMILE CHARTS FOR DISPLAYS	50
B31	CONDUCT SHIFT CHANGE BRIEFINGS	50
J381	PLOT POSITION OF TROPICAL STORMS	50
J369	PLOT AIRWAYS CODES	50

TABLE A6

PLOTTER
(STG172)

NUMBER IN GROUP: 22
PERCENT OF SAMPLE: 1%
PERCENT SUPERVISING: 5%

AVERAGE TIME IN JOB: 11 MONTHS
AVERAGE TAFMS: 34 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 47

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
G246	REPLACE FACSIMILE PAPER ROLLS	100
F188	FILE TELETYPE MESSAGES	95
F173	CLEAN WEATHER FACILITIES	95
G234	CHANGE PRINTER RIBBONS	95
F208	POST CHARTS	91
G235	CLEAN WEATHER EQUIPMENT	91
F187	FILE PLOTTED CHARTS OR MAPS	82
J386	PLOT SKEW-T DIAGRAMS	82
I367	TEAR MAPS FROM FACSIMILE PRINTERS	77
F185	FILE AUTOMATED FACSIMILE CHARTS	77
F210	POST TELETYPE MESSAGES	77
J381	PLOT POSITION OF TROPICAL STORMS	73
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	73
F178	DECODE WEATHER FORECASTS	73
F177	DECODE TELETYPE MESSAGES	73
F195	MAKE ENTRIES IN STATION LOGS	73
G254	REPLACE PAPER ON TELETYPES	73
F214	PREPARE DAILY WEATHER MAPS	68
F176	DECODE FORECAST BULLETINS	64
G249	REPLACE HELIX WIRES OR STYLUS BLADES ON FACSIMILE RECORDERS	64
G248	REPLACE FILM OR PAPER ON SATELLITE RECEIVER MACHINES	64
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	59
B31	CONDUCT SHIFT CHANGE BRIEFINGS	59
G256	REPLACE PAPER OR INK CARTRIDGES ON PRINTERS	56
F220	PROCESS FACSIMILE CHARTS FOR DISPLAYS	55
J376	PLOT LOCAL AREA WORK CHARTS (LAWCs)	55
F193	INITIATE, ANNOTATE, OR COMPLETE AWS FORMS 42 (WEATHER EQUIPMENT/COMMUNICATIONS SERVICE RECORD)	55
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	45
J395	TRACE CONTINUITY CHARTS	45
F186	FILE LOCAL WEATHER DISSEMINATION SYSTEM (LWDS) DATA	45
A22	PREPARE BRIEFING CHARTS, NOTES, OR TRANSPARENCIES	45
I312	ASSEMBLE AND DISTRIBUTE FORECASTING TOOLS, SUCH AS SATELLITE IMAGERIES, COMPUTER PRODUCTS, OR WEATHER MAPS	41

TABLE A7

WEATHER CENTRAL OBSERVER
(STG259)

NUMBER IN GROUP: 8
PERCENT OF SAMPLE: Less than 1%
PERCENT SUPERVISING: 0

AVERAGE TIME IN JOB: 23 MONTHS
AVERAGE TAFMS: 48 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 40

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
G234	CHANGE PRINTER RIBBONS	100
G246	REPLACE FACSIMILE PAPER ROLLS	88
I367	TEAR MAPS FROM FACSIMILE PRINTERS	88
F229	TROUBLESHOOT WEATHER COMMUNICATIONS EQUIPMENT OUTAGES	88
F195	MAKE ENTRIES IN STATION LOGS	88
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	88
F210	POST TELETYPE MESSAGES	88
F173	CLEAN WEATHER FACILITIES	88
H304	TRANSMIT TELETYPE MESSAGES	75
H305	TRANSMIT WEATHER ADVISORIES, WARNINGS, OR WATCHES	75
F194	LABEL WEATHER MAPS AND CHARTS FOR FACSIMILE NETWORK TRANSMISSIONS	75
H280	DISTRIBUTE TELETYPE MESSAGES	75
H296	TRANSMIT DATA USING TELEPHONE FACSIMILES (TELEFAXs)	75
G254	REPLACE PAPER ON TELETYPES	75
F187	FILE PLOTTED CHARTS OR MAPS	75
F188	FILE TELETYPE MESSAGES	75
F209	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, OR TAKE-OFF DATA	75
G236	MAINTAIN EQUIPMENT, OTHER THAN WEATHER EQUIPMENT	75
J383	PLOT RAREPS	75
H306	TRANSMIT WEATHER MAPS OR CHARTS ON WEATHER FACSIMILE NETWORKS	63
G235	CLEAN WEATHER EQUIPMENT	63
F225	REDUCE WEATHER MAPS OR CHARTS FOR FACSIMILE NETWORK TRANSMISSIONS	63
F208	POST CHARTS	63
G256	REPLACE PAPER OR INK CARTRIDGES ON PRINTERS	63
F177	DECODE TELETYPE MESSAGES	63
I357	PREPARE TELETYPE PRODUCTS	50
F220	PROCESS FACSIMILE CHARTS FOR DISPLAYS	50
G265	SWITCH COMMUNICATION MACHINES ON-AND-OFF LINE	50
P550	ACTIVATE OR DEACTIVATE CONTINGENCY PACKAGES ON COMMUNICATIONS NETWORKS	50
F179	ENCODE MESSAGES	50

TABLE A8

GLOBAL WEATHER OBSERVER
(STG181)

NUMBER IN GROUP: 11
PERCENT OF SAMPLE: Less than 1%
PERCENT SUPERVISING: 18%

AVERAGE TIME IN JOB: 16 MONTHS
AVERAGE TAFMS: 24 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 27

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
J391	PLOT TURBULENCE REPORTS	100
G246	REPLACE FACSIMILE PAPER ROLLS	100
G254	REPLACE PAPER ON TELETYPES	100
F226	REPRODUCE WEATHER CHARTS	91
J375	PLOT ICING REPORTS	91
F188	FILE TELETYPE MESSAGES	91
F208	POST CHARTS	91
F177	DECODE TELETYPE MESSAGES	82
G234	CHANGE PRINTER RIBBONS	82
G249	REPLACE HELIX WIRES OR STYLUS BLADES ON FACSIMILE RECORDERS	82
J385	PLOT SEVERE WEATHER REPORTS	73
I367	TEAR MAPS FROM FACSIMILE PRINTERS	73
F185	FILE AUTOMATED FACSIMILE CHARTS	64
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	64
B31	CONDUCT SHIFT CHANGE BRIEFINGS	64
F225	REDUCE WEATHER MAPS OR CHARTS FOR FACSIMILE NETWORK TRANSMISSIONS	64
H304	TRANSMIT TELETYPE MESSAGES	56
F220	PROCESS FACSIMILE CHARTS FOR DISPLAYS	55
I312	ASSEMBLE AND DISTRIBUTE FORECASTING TOOLS, SUCH AS SATELLITE IMAGERIES, COMPUTER PRODUCTS, OR WEATHER MAPS	45
J380	PLOT PIREPs	45
F187	FILE PLOTTED CHARTS OR MAPS	45
G245	REPLACE CHEMICALS IN COPY MACHINES	39
F179	ENCODE MESSAGES	36
F223	RECORD OR ENCODE PILOT REPORTS (PIREPs)	28
D86	CONDUCT OJT	28
J369	PLOT AIRWAYS CODES	28
R727	POST SATELLITE IMAGERIES	27
H280	DISTRIBUTE TELETYPE MESSAGES	27

TABLE A9

SEVERE WEATHER FORECASTER
(STG242)

NUMBER IN GROUP: 21
PERCENT OF SAMPLE: 1%
PERCENT SUPERVISING: 62%

AVERAGE TIME IN JOB: 20 MONTHS
AVERAGE TAFMS: 151 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 70

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
L466	ANALYZE VORTICITY CHARTS	100
L464	ANALYZE UPPER AIR CHARTS	100
L455	ANALYZE SEVERE WEATHER FEATURES	95
K428	PREPARE WEATHER WARNINGS	95
L453	ANALYZE SATELLITE DATA	95
L459	ANALYZE SYNOPTIC SURFACE CHARTS	95
F178	DECODE WEATHER FORECASTS	95
F177	DECODE TELETYPE MESSAGES	90
L461	ANALYZE THICKNESS CHARTS	90
L456	ANALYZE SKEW-T DIAGRAMS	90
B31	CONDUCT SHIFT CHANGE BRIEFINGS	90
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	86
H305	TRANSMIT WEATHER ADVISORIES, WARNINGS, OR WATCHES	86
F176	DECODE FORECAST BULLETINS	86
F214	PREPARE DAILY WEATHER MAPS	86
L465	ANALYZE UPPER LEVEL WINDS	81
L457	ANALYZE STABILITY CHARTS	76
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	76
F188	FILE TELETYPE MESSAGES	76
L458	ANALYZE STREAMLINE CHARTS	71
L468	INITIALIZE NUMERICAL WEATHER PRODUCTS (NWPs)	71
H289	ISSUE, CANCEL, EXTEND, OR AMEND LOCAL WEATHER WARNINGS	67
F221	PRODUCE FACSIMILE PRODUCTS	67
L447	ANALYZE MOISTURE CHARTS	67
L469	REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	62
K433	VERIFY FORECASTS	62
K436	VERIFY WEATHER WARNINGS	57
L454	ANALYZE SENSIBLE WEATHER PLOTS	57
L460	ANALYZE TEMPERATURE CHARTS	57
M477	DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENTS	52
K431	PROG SURFACE OR UPPER AIR FEATURES	52
M483	PERFORM DIAL-UP RADAR PROCEDURES	48
K418	PREPARE MASTER FACSIMILE CHARTS	48
H287	ISSUE WEATHER FORECASTS	48
M473	DETERMINE ECHO INTENSITIES	43

TABLE A10

CONTINGENCY SUPPORT
(STG188)

NUMBER IN GROUP: 25
PERCENT OF SAMPLE: 1%
PERCENT SUPERVISING: 32%

AVERAGE TIME IN JOB: 22 MONTHS
AVERAGE TAFMS: 139 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 64

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
F178	DECODE WEATHER FORECASTS	100
F181	ENCODE WEATHER FORECASTS	96
F176	DECODE FORECAST BULLETINS	96
F177	DECODE TELETYPE MESSAGES	96
F179	ENCODE MESSAGES	92
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	92
B31	CONDUCT SHIFT CHANGE BRIEFINGS	92
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	88
K412	PREPARE DROP ZONE FORECASTS	88
K399	AMEND WEATHER FORECASTS	88
H287	ISSUE WEATHER FORECASTS	84
L465	ANALYZE UPPER LEVEL WINDS	84
K433	VERIFY FORECASTS	84
L453	ANALYZE SATELLITE DATA	80
K424	PREPARE SHORT RANGE WEATHER FORECASTS	80
L464	ANALYZE UPPER AIR CHARTS	80
K411	PREPARE CENTRALIZED TERMINAL FORECASTS	76
K407	PREPARE AIRCRAFT OPERATIONS FORECASTS	76
F188	FILE TELETYPE MESSAGES	76
K405	EXTRACT INFORMATION FROM SENSIBLE WEATHER PLOTS	72
K404	EXTRACT INFORMATION FROM CLIMATOLOGICAL RECORDS	72
F195	MAKE ENTRIES IN STATION LOGS	72
F208	POST CHARTS	72
L454	ANALYZE SENSIBLE WEATHER PLOTS	68
L459	ANALYZE SYNOPTIC SURFACE CHARTS	64
H307	TRANSMIT WEATHER REPORTS OVER AUTODIN	64
L458	ANALYZE STREAMLINE CHARTS	64
L456	ANALYZE SKEW-T DIAGRAMS	64
K431	PROG SURFACE OR UPPER AIR FEATURES	60
L466	ANALYZE VORTICITY CHARTS	60
L461	ANALYZE THICKNESS CHARTS	60
K417	PREPARE LONG RANGE WEATHER OUTLOOKS	56
K432	VERIFY DATA USED IN PREPARATION OF WEATHER FORECASTS	56
H308	TRANSMIT WEATHER REPORTS OVER WEATHER NETWORKS	40

TABLE A11

DUTY FORECASTER
(STG189)

NUMBER IN GROUP: 14
PERCENT OF SAMPLE: More than 1%
PERCENT SUPERVISING: 36%

AVERAGE TIME IN JOB: 31 MONTHS
AVERAGE TAFMS: 157 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 89

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
H274	BRIEF NONWEATHER PERSONNEL	100
L464	ANALYZE UPPER AIR CHARTS	100
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	100
L453	ANALYZE SATELLITE DATA	93
H272	BRIEF COMMANDERS	93
F178	DECODE WEATHER FORECASTS	93
F177	DECODE TELETYPE MESSAGES	93
F176	DECODE FORECAST BULLETINS	93
B31	CONDUCT SHIFT CHANGE BRIEFINGS	93
G246	REPLACE FACSIMILE PAPER ROLLS	93
A22	PREPARE BRIEFING CHARTS, NOTES, OR TRANSPARENCIES	86
F214	PREPARE DAILY WEATHER MAPS	86
L469	REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	86
F195	MAKE ENTRIES IN STATION LOGS	86
L456	ANALYZE SKEW-T DIAGRAMS	86
G248	REPLACE FILM OR PAPER ON SATELLITE RECEIVER MACHINES	86
L446	ANALYZE LAWCs	86
F193	INITIATE, ANNOTATE, OR COMPLETE AWS FORMS 42 (WEATHER EQUIPMENT/COMMUNICATIONS SERVICE RECORD)	86
F220	PROCESS FACSIMILE CHARTS FOR DISPLAYS	79
L466	ANALYZE VORTICITY CHARTS	79
I367	TEAR MAPS FROM FACSIMILE PRINTERS	79
F208	POST CHARTS	79
F206	PERFORM QUALITY ASSURANCE PROCEDURES	71
H287	ISSUE WEATHER FORECASTS	64
L461	ANALYZE THICKNESS CHARTS	64
J381	PLOT POSITION OF TROPICAL STORMS	64
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	57
L455	ANALYZE SEVERE WEATHER FEATURES	57
F181	ENCODE WEATHER FORECASTS	57
L465	ANALYZE UPPER LEVEL WINDS	57
K424	PREPARE SHORT RANGE WEATHER FORECASTS	50
H270	BRIEF ALERT COMMAND POST DUTY OFFICERS	50
K417	PREPARE LONG RANGE WEATHER OUTLOOKS	43
H271	BRIEF ALERT CONTROLLERS	43

TABLE A12

METWATCH OBSERVER
(STG184)

NUMBER IN GROUP: 9
PERCENT OF SAMPLE: More than 1%
PERCENT SUPERVISING: 0

AVERAGE TIME IN JOB: 131 MONTHS
AVERAGE TAFMS: 51 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 64

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
U861	PRINT AWDS ALPHANUMERIC OR GRAPHICS PRODUCTS	100
F178	DECODE WEATHER FORECASTS	100
U851	DISPLAY AWDS PRODUCTS	100
U857	MONITOR RECEIPT OF AWDS WEATHER DATA	100
U862	REBOOT AWDS PROGRAMS	100
F177	DECODE TELETYPE MESSAGES	100
U834	ACKNOWLEDGE ALARMS OR ALERTS ON AWDS WORK STATIONS	100
U859	PERFORM AWDS STARTUP OR SHUTDOWN PROCEDURES	100
U863	RESTART AWDS WORK STATIONS FROM COMMUNICATIONS/DATA MONITORS (C/DMs)	100
F173	CLEAN WEATHER FACILITIES	100
U866	STORE LOCALLY CREATED OR MODIFIED AWDS PRODUCTS	100
G235	CLEAN WEATHER EQUIPMENT	100
G234	CHANGE PRINTER RIBBONS	100
U864	ROUTE AWDS PRODUCTS TO FUNCTIONAL AREAS, OTHER THAN RMSM	100
U849	CREATE, UPDATE, OR DISPLAY AWDS PRODUCT LOOP SEQUENCES	80
F176	DECODE FORECAST BULLETINS	80
I310	ADVISE FORECASTERS OF CHANGING WEATHER CONDITIONS	80
F222	RECORD OR ENCODE AIR REPORTS (AIREPs)	80
H294	TRANSMIT AIREPs	80
J380	PLOT PIREPs	80
J391	PLOT TURBULENCE REPORTS	80
U852	EDIT AWDS PRODUCTS	80
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	80
H272	BRIEF COMMANDERS	80
U844	CREATE OR EDIT AWDS COMMAND SEQUENCES	80
F182	EVALUATE MISSION IMPACT OF EQUIPMENT OUTAGES	80
K406	PERFORM METEOROLOGICAL WATCHES (METWATCHES), SUCH AS AREA OR TERMINAL	60
F204	PERFORM PMSV CONTACTS	60
B31	CONDUCT SHIFT CHANGE BRIEFINGS	60
H270	BRIEF ALERT COMMAND POST DUTY OFFICERS	60
G256	REPLACE PAPER OR INK CARTRIDGES ON PRINTERS	60
F195	MAKE ENTRIES IN STATION LOGS	60
J375	PLOT ICING REPORTS	60
F214	PREPARE DAILY WEATHER MAPS	60

TABLE A13

AWDS SYSTEM MANAGER
(STG171)

NUMBER IN GROUP: 11
PERCENT OF SAMPLE: More than 1%
PERCENT SUPERVISING: 64%

AVERAGE TIME IN JOB: 37 MONTHS
AVERAGE TAFMS: 196 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 142

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
U851	DISPLAY AWDS PRODUCTS	100
U852	EDIT AWDS PRODUCTS	100
U853	GENERATE AWDS HORIZONTAL PRODUCTS	100
U848	CREATE OR MODIFY AWDS TABLES, SUCH AS EXTERNAL PRODUCTS RETENTION TABLES OR STATION SELECT SURFACE TABLES	100
U857	MONITOR RECEIPT OF AWDS WEATHER DATA	100
U868	TROUBLESHOOT AWDS DEFICIENCIES OR OUTAGES	100
U849	CREATE, UPDATE, OR DISPLAY AWDS PRODUCT LOOP SEQUENCES	100
U834	ACKNOWLEDGE ALARMS OR ALERTS ON AWDS WORK STATIONS	100
U854	GENERATE AWDS VERTICAL PRODUCTS	100
U855	INPUT AWDS ALPHANUMERIC WEATHER DATA	100
U861	PRINT AWDS ALPHANUMERIC OR GRAPHICS PRODUCTS	100
U863	RESTART AWDS WORK STATIONS FROM COMMUNICATIONS/DATA MONITORS (C/DMs)	100
U850	DECODE PRODUCT IDENTIFICATIONS (PIDs)	91
U844	CREATE OR EDIT AWDS COMMAND SEQUENCES	91
U859	PERFORM AWDS STARTUP OR SHUTDOWN PROCEDURES	91
U866	STORE LOCALLY CREATED OR MODIFIED AWDS PRODUCTS	91
U864	ROUTE AWDS PRODUCTS TO FUNCTIONAL AREAS, OTHER THAN RMSM	91
U846	CREATE OR MODIFY AWDS CHECKPOINT TAPES	91
U838	ASSIGN FUNCTION KEYS ON AWDS WORK STATIONS	91
U862	REBOOT AWDS PROGRAMS	82
U860	PERFORM AWDS SYSTEM MANAGER REMOVABLE MAGNETIC STORAGE MEDIA (RMSM) PROCEDURES	82
U865	ROUTE AWDS PRODUCTS TO RMSM	82
U847	CREATE OR MODIFY AWDS PLOT MODELS	82
U840	CREATE AWDS METWATCH ALARMS	82
U867	TRAIN NON-WEATHER PERSONNEL ON AWDS EQUIPMENT	73
U836	ANALYZE AWDS VERTICAL CROSS-SECTION PRODUCTS	73
U845	CREATE OR MAINTAIN CONTINUITY LOGS	73
U841	CREATE DATA STORAGE TAPES USING AAI FUNCTIONS	73
D99	EVALUATE PROGRESS OF TRAINEES	64
U835	ANALYZE AWDS LOCALLY GENERATED GRIDS (LGGs)	64
D87	CONDUCT SPECIALIZED TRAINING	55
D101	EVALUATE TRAINING METHODS AND TECHNIQUES	55

TABLE A14

UPPER AIR OBSERVER
(STG178)

NUMBER IN GROUP: 27
PERCENT OF SAMPLE: 1%
PERCENT SUPERVISING: 0

AVERAGE TIME IN JOB: 19 MONTHS
AVERAGE TAFMS: 28 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 81

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
N490	ASSEMBLE RAWINSONDE BALLOON EQUIPMENT	100
N508	OPERATE RAWINSONDE SET EQUIPMENT AT RELEASE	97
N501	INFLATE BALLOONS WITH HELIUM	96
N507	OBTAIN BALLOON RELEASE CLEARANCES	96
N502	LAUNCH FLIGHT EQUIPMENT	93
N522	SELECT RAWINSONDE DATA FOR TRANSMISSION	93
N534	VERIFY UPPER AIR DATA	89
N497	ENCODE RADIOSONDE FREEZING (RADAT) LEVEL DATA	89
N528	TAKE RELEASE OBSERVATIONS	89
F173	CLEAN WEATHER FACILITIES	89
N489	ASSEMBLE FLIGHT TRAINS	85
F199	PERFORM BUILDING SECURITY CHECKS	85
J386	PLOT SKEW-T DIAGRAMS	85
H301	TRANSMIT RAWINSONDE REPORTS	81
N491	CALCULATE VOLUME OF GAS TO BE USED IN BALLOON INFLATIONS	78
I358	READ DRY AND WET BULB TEMPERATURES	78
N535	VISUALLY TRACK PIBALs	78
N517	PREPARE PIBALs FOR LAUNCH	78
G235	CLEAN WEATHER EQUIPMENT	78
N500	EVALUATE UPPER AIR DATA	74
G239	PERFORM PREFLIGHT CHECKS ON RADIOSONDE INSTRUMENTS	74
N511	PERFORM RADIOSONDE PREFLIGHT CIRCUIT CHECKS	74
N531	TEST RAWINSONDE BALLOON EQUIPMENT	74
I343	ESTIMATE HEIGHT OF CLOUD LAYERS USING BALLOONS	74
G241	PERFORM PREFLIGHT OPERATIONAL CHECKS ON METEOROLOGICAL UPPER AIR TRACKING EQUIPMENT	70
N498	ENCODE RAOB DATA	70
N506	MOUNT AND LEVEL THEODOLITES	70
I346	ESTIMATE HEIGHT OF CLOUD LAYERS USING RAWINSONDE OBSERVATIONS	70
N492	CALCULATE WINDSPEEDS AND DIRECTIONS	67
N504	LOAD RADIOSONDE TAPES INTO DATA PROCESSING UNITS	67
N503	LOAD PROGRAM TAPES INTO DATA PROCESSING UNITS	67
N525	SET UP RAWINSONDE SETS	59
N509	ORIENT RAWINSONDE SETS	56

TABLE A15

MANAGER
(STG105)

NUMBER IN GROUP: 18
PERCENT OF SAMPLE: 1%
PERCENT SUPERVISING: 0

AVERAGE TIME IN JOB: 36 MONTHS
AVERAGE TAFMS: 236 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 19

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
E171	WRITE CORRESPONDENCE	100
E126	EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	78
B28	COMPILE DATA FOR STAFF STUDIES	72
B27	COMPILE DATA FOR REPORTS	67
C61	EVALUATE PROPOSED PUBLICATIONS	67
E158	PREPARE CORRESPONDENCE FOR MAILING	61
C81	VERIFY AF FORMS 3215 (COMMUNICATIONS-COMPUTER SYSTEMS REQUIREMENTS DOCUMENT)	56
C65	EVALUATE SUGGESTIONS	56
E170	SUBMIT AF FORMS 3215 (COMMUNICATIONS-COMPUTER SYSTEMS REQUIREMENTS DOCUMENT)	50
F199	PERFORM BUILDING SECURITY CHECKS	50
E169	REVIEW INCOMING OR OUTGOING CORRESPONDENCE	50
A15	DRAFT DIRECTIVES OR DIRECTIVE CHANGES	44
A22	PREPARE BRIEFING CHARTS, NOTES, OR TRANSPARENCIES	39
B29	CONDUCT BRIEFINGS, OTHER THAN WEATHER	39
E143	MAINTAIN CORRESPONDENCE FILES	33
B33	COORDINATE MAINTENANCE OF EQUIPMENT OR FACILITIES WITH APPROPRIATE AGENCIES	33
A5	DETERMINE WORK PRIORITIES	33
E164	PREPARE REQUESTS FOR TDY	33
B34	COORDINATE WEATHER SUPPORT REQUIREMENTS WITH APPROPRIATE AGENCIES	28
A3	DETERMINE LOGISTICS REQUIREMENTS, UCH AS EQUIPMENT, PERSONNEL, OR SPACE	28
A18	PLAN BRIEFINGS	28
C53	CONDUCT STAFF ASSISTANCE VISITS	28
C66	EVALUATE WEATHER SUPPORT REQUIREMENTS	28
C76	REVIEW INSPECTION REPORTS	28
E131	EVALUATE EQUIPMENT AUTHORIZATION CHANGES	22
C75	REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	22
C80	REVIEW UNIT RESPONSES TO STAFF ASSISTANCE VISIT FINDINGS	22
C77	REVIEW STAFF ASSISTANCE VISIT REPORTS	22
E150	MAINTAIN PUBLICATION FILES, OTHER THAN TECHNICAL ORDERS	17
A4	DETERMINE METEOROLOGICAL DATA REQUIREMENTS	17

TABLE A16

SUPERVISOR
(STG020)

NUMBER IN GROUP: 123
PERCENT OF SAMPLE: 7%
PERCENT SUPERVISING: 70

AVERAGE TIME IN JOB: 19 MONTHS
AVERAGE TAFMS: 216 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 76

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
E171	WRITE CORRESPONDENCE	77
B27	COMPILE DATA FOR REPORTS	72
E126	EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	68
A5	DETERMINE WORK PRIORITIES	67
C82	WRITE EPRs	67
B35	COUNSEL SUBORDINATES ON PERSONAL OR MILITARY-RELATED MATTERS	67
E169	REVIEW INCOMING OR OUTGOING CORRESPONDENCE	67
A16	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	65
C83	WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	64
C73	PERFORM SELF-INSPECTIONS	60
C71	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	59
C59	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	55
B39	IMPLEMENT QUALITY ASSURANCE PROCEDURES	55
C52	CONDUCT PERFORMANCE FEEDBACK WORKSHEET (PFW) SESSIONS	54
A13	DEVELOP WORK METHODS	54
B46	ORIENT NEWLY ASSIGNED PERSONNEL	54
C62	EVALUATE QUALITY ASSURANCE PROCEDURES	53
B47	PERFORM TASK CERTIFICATIONS	52
A9	DEVELOP QUALITY ASSURANCE PROGRAMS	51
A15	DRAFT DIRECTIVES OR DIRECTIVE CHANGES	51
A21	PLAN WORK ASSIGNMENTS	48
B43	IMPLEMENT WORK METHODS	47
C66	EVALUATE WEATHER SUPPORT REQUIREMENTS	46
C67	EVALUATE WORK SCHEDULES	46
C60	EVALUATE PERSONNEL FOR RETENTION IN AIR FORCE	45
C63	EVALUATE QUALITY ASSURANCE PRODUCTS	45
C75	REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	45
D97	EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	41
C68	INDORSE ENLISTED PERFORMANCE REPORTS (EPRs)	40
A17	ESTABLISH WORK SCHEDULES	39
E158	PREPARE CORRESPONDENCE FOR MAILING	38
B34	COORDINATE WEATHER SUPPORT REQUIREMENTS WITH APPROPRIATE AGENCIES	35
B28	COMPILE DATA FOR STAFF STUDIES	33

TABLE A17

DATA PROCESSING
(STG036)

NUMBER IN GROUP: 29
PERCENT OF SAMPLE: 2%
PERCENT SUPERVISING: 24

AVERAGE TIME IN JOB: 46 MONTHS
AVERAGE TAFMS: 170 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 52

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
P625	TEST WEATHER COMPUTER SOFTWARE	79
P629	WRITE COMPUTER SOFTWARE CODES	76
P628	WRITE COMPUTER RUNSTREAMS	76
P560	CREATE COMPUTER CONTROL INSTRUCTIONS	66
E171	WRITE CORRESPONDENCE	62
A23	PREPARE LEAVE SCHEDULES	59
P566	DESIGN WEATHER COMPUTER SOFTWARE, OTHER THAN FOR REAL-TIME OPERATING SYSTEMS	59
P622	SUBMIT COMPUTER RUNSTREAMS	55
P627	UPDATE COMPUTER SOFTWARE	55
N522	SELECT RAWINSONDE DATA FOR TRANSMISSION	55
P611	PREPARE INTERNAL COMPUTER SOFTWARE DOCUMENTATION	55
P587	INITIATE SOFTWARE PROBLEM REPORTS	55
P607	PERFORM SOFTWARE PROJECT MANAGEMENT	52
P620	SET UP REQUIREMENTS FOR PROGRAM RUNS	52
P580	EXTRACT STATION IDENTIFICATION DATA FROM MASTER STATION CATALOGS	52
P559	CONSTRUCT DATA BASES	52
P568	DETERMINE FLOW SEQUENCES OF COMPUTER SOFTWARE	52
P573	EVALUATE COMPUTER OUTPUTS FOR METEOROLOGICAL ACCURACIES	48
P555	COMMUNICATE WITH DATA EXECUTIVE SYSTEMS	48
P574	EVALUATE EFFECTIVENESS OF WEATHER COMPUTER SOFTWARE	48
P610	PREPARE EXTERNAL COMPUTER SOFTWARE DOCUMENTATION	48
P621	SPECIFY WEATHER INPUT-OUTPUT FORMATS	48
P614	READ MEMORY AND MASS STORAGE DUMPS	48
A5	DETERMINE WORK PRIORITIES	48
P577	EXAMINE ACCURACY OF USER PRODUCTS	45
E158	PREPARE CORRESPONDENCE FOR MAILING	45
E138	INTERPRET COMPUTER OUTPUT PRODUCTS	41
P592	LOAD MEMORY AND MASS STORAGE DEVICES	41
P605	PERFORM COMPUTER SOFTWARE MAINTENANCE	38
P579	EXTRACT AND REFORMAT COMPUTERIZED WEATHER DATA	38
P569	DETERMINE WEATHER FACTORS TO BE USED IN COMPUTER SOFTWARE	38
E141	MAIL METEROLOGICAL DATA TO USING AGENCIES	34
P565	DESIGN WEATHER COMPUTER SOFTWARE FOR REAL-TIME OPERATING SYSTEMS	34

TABLE A18

DATA MONITOR
(STG155)

NUMBER IN GROUP: 6
PERCENT OF SAMPLE: More than 1%
PERCENT SUPERVISING: 17

AVERAGE TIME IN JOB: 23 MONTHS
AVERAGE TAFMS: 48 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 31

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
F195	MAKE ENTRIES IN STATION LOGS	100
F188	FILE TELETYPE MESSAGES	100
F199	PERFORM BUILDING SECURITY CHECKS	100
G254	REPLACE PAPER ON TELETYPES	100
P572	EDIT COMPUTER REJECTED WEATHER DATA	83
F176	DECODE FORECAST BULLETINS	83
F177	DECODE TELETYPE MESSAGES	83
F191	IMPLEMENT OPERATION PLAN (OPLAN) ALERT TASKS	83
F229	TROUBLESHOOT WEATHER COMMUNICATIONS EQUIPMENT OUTAGES	83
F173	CLEAN WEATHER FACILITIES	83
B31	CONDUCT SHIFT CHANGE BRIEFINGS	
C73	PERFORM SELF-INSPECTIONS	83
G256	REPLACE PAPER OR INK CARTRIDGES ON PRINTERS	83
F178	DECODE WEATHER FORECASTS	67
P615	REINSERT RTD WEATHER REPORTS INTO COMPUTER SYSTEMS	67
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	67
P550	ACTIVATE OR DEACTIVATE CONTINGENCY PACKAGES ON COMMUNICATIONS NETWORKS	67
P603	MONITOR UNAUTHORIZED TELETYPE TRANSMISSIONS	67
G264	REPORT WEATHER COMPUTER MALFUNCTIONS	67
B29	CONDUCT BRIEFINGS, OTHER THAN WEATHER	50
P602	MONITOR SOLAR FLARE BULLETINS FOR IMPACT ON GWIPs	50
F206	PERFORM QUALITY ASSURANCE PROCEDURES	50
F190	IMPLEMENT OPERATION ORDER (OPORD) ALERT TASKS	50
F189	IMPLEMENT CONTINGENCY PLAN (CONPLAN) ALERT TASKS	50
P584	INITIATE CORRECTIVE PROCEDURES FOR DATA ERRORS	50
F202	PERFORM EMERGENCY WAR ORDER/OPERATIONAL READINESS INSPECTION (EWO/ORI) ALERT TASKS	50
P601	MONITOR RESPONSES TO DATA DEFICIENCY BULLETINS	50
P617	RESEARCH WEATHER INFORMATION FOR COMPUTER SYSTEMS	50
F197	NOTIFY ALTERNATE STATIONS ON COMMAND CONTROL AND LONG LINE CIRCUITS OF EQUIPMENT OUTAGES	50
A22	PREPARE BRIEFING CHARTS, NOTES, OR TRANSPARENCIES	33
C52	CONDUCT PERFORMANCE FEEDBACK WORKSHEET (PFW) SESSIONS	17
B40	IMPLEMENT SAFETY PROGRAMS	17
F179	ENCODE MESSAGES	17

TABLE A19

DATA CONTROLLER
(STG149)

NUMBER IN GROUP: 7
PERCENT OF SAMPLE: More than 1%
PERCENT SUPERVISING: 0

AVERAGE TIME IN JOB: 10 MONTHS
AVERAGE TAFMS: 42 MONTHS
AVERAGE NUMBER OF TASKS PERFORMED: 15

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

TASKS		PERCENT MEMBERS PERFORMING
F195	MAKE ENTRIES IN STATION LOGS	100
P572	EDIT COMPUTER REJECTED WEATHER DATA	86
F199	PERFORM BUILDING SECURITY CHECKS	86
P550	ACTIVATE OR DEACTIVATE CONTINGENCY PACKAGES ON COMMUNICATIONS NETWORKS	71
P584	INITIATE CORRECTIVE PROCEDURES FOR DATA ERRORS	71
G254	REPLACE PAPER ON TELETYPES	57
F188	FILE TELETYPE MESSAGES	57
P626	TRACE MISSING BULLETINS OR MESSAGES	57
P615	REINSERT RTD WEATHER REPORTS INTO COMPUTER SYSTEMS	57
F193	INITIATE, ANNOTATE, OR COMPLETE AWS FORMS 42 (WEATHER EQUIPMENT/COMMUNICATIONS SERVICE RECORD)	57
F173	CLEAN WEATHER FACILITIES	43
P576	EVALUATE RETARGETING GLOBAL WEATHER INTERCEPT PROGRAM (GWIP) DATA	43
P616	RELAY SPECIAL DATA REQUESTS	43
G234	CHANGE PRINTER RIBBONS	43
P618	ROUTE EMERGENCY REQUESTED DATA	43
P582	IDENTIFY NEW WEATHER MESSAGES	43
P580	EXTRACT STATION IDENTIFICATION DATA FROM MASTER STATION CATALOGS	43
B31	CONDUCT SHIFT CHANGE BRIEFINGS	43
E117	ANNOTATE SF FORMS 701 (ACTIVITY SECURITY CHECKLIST)	43
P585	INITIATE INCLUSION OF NEW MESSAGE SOURCES INTO MESSAGE DISTRIBUTION LIBRARY (MDLs)	29
F211	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	29
F210	POST TELETYPE MESSAGES	29
P599	MONITOR RECEIPT OF SATELLITE TRANSMITTED WEATHER DATA	14
E126	EDIT OFFICIAL CORRESPONDENCE OR MESSAGES	14
P567	DETERMINE AUTHENTICITY OF RADIO-INTERCEPT STATIONS	14
P588	INITIATE SYSTEM RECOVERY PROCEDURES	14
P623	SURVEY RADIO-INTERCEPT STATIONS	14
H304	TRANSMIT TELETYPE MESSAGES	14
F197	NOTIFY ALTERNATE STATIONS ON COMMAND CONTROL AND LONG LINE CIRCUITS OF EQUIPMENT OUTAGES	14
P575	EVALUATE REJECTED MESSAGES OR REPORTS FOR SOFTWARE UPDATES	14

APPENDIX B

TABLE B1

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM		PERCENT MEMBERS PERFORMING				
		X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
11b(9). SATELLITE BULLETINS						
J384	PLOT SATELLITE BULLETINS	2	2	2	9	7
12c. DETERMINE WIND DIRECTION AND SPEED FROM VECTOR DIAGRAMS						
K410	PREPARE CENTRALIZED PROBABILITY FORECASTS	0	0	0	7	2
20b(4). TELEPHONE ANSWERING DEVICES						
K409	PREPARE AND PRESENT MEDIA WEATHER FORECASTS	0	0	1	14	12
21a. OPERATE SOLAR OPTICAL EQUIPMENT (RAZDOW) OR AN/FMQ-7 TELESCOPE						
Q632	ANALYZE AND REPORT SOLAR FLARES	0	0	0	1	2
Q645	CALIBRATE OPTICAL TELESCOPES	0	0	0	1	2
Q647	CALIBRATE SWEEP FREQUENCY INTERFEROMETER RADIOMETERS (SFIRs)	0	0	0	1	1
Q648	CLASSIFY SOLAR BURST PARAMETERS	0	0	0	1	1
Q649	CONDUCT TELESCOPE ALIGNMENT CHECKS	0	0	0	1	1
Q661	PERFORM CALIBRATION CHECKS (CALCHECKs)	1	1	0	1	2
Q662	PERFORM FLARE PATROLS IN AUTOMATIC MODE	0	0	0	1	2
Q663	PERFORM FLARE PATROLS IN SEMIAUTOMATIC MODE	0	0	0	1	2
Q665	PERFORM IMAGE ROTATOR CHECKS	0	0	0	1	2
Q667	PERFORM OPTICAL END-OF-DAY TELESCOPE SHUTDOWNS	0	0	0	1	2
Q669	PERFORM SOLAR ACQUISITION PROCEDURES	0	0	0	1	2
Q670	PERFORM SOLAR PRESUNRISE PROCEDURES	0	0	0	1	2

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM		PERCENT MEMBERS PERFORMING				
		X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
Q671	PERFORM SOLAR SPECTROGRAPHIC ANALYSIS	0	0	0	1	2
Q672	PERFORM WHITE LIGHT ANALYSIS	0	0	0	1	2
Q702	TAKE GEMAG OBSERVATIONS	0	1	1	1	0
Q703	TAKE TELCO OBSERVATIONS	0	1	0	0	0
Q704	TAKE VERTICAL IONOSPHERIC (IONSS) OBSERVATIONS	0	0	0	0	0
21b.	OPERATE SOLAR RADIOMETER AND INTERFEROMETER EQUIPMENT AND IDENTIFY/ INTERPRET SOLAR RADIO NOISE BURSTS					
G258	REPLACE RADIOMETER RECORDER CHARTS	0	0	0	0	1
Q630	ADJUST RADIOMETER RECORDER CHART PENS	0	0	0	1	1
Q631	ANALYZE AND REPORT SCINTILLATION DATA	0	1	0	0	0
Q636	ANALYZE RADIO BURST SPECTRUM DATA	0	0	1	1	3
Q637	ANALYZE RADIO FREQUENCY INTERFERENCES (RFIs)	0	0	0	1	2
Q640	CALCULATE ABSOLUTE NOISE TUBE (ANT) VALUES	0	0	0	0	1
Q644	CALIBRATE FIXED FREQUENCY RADIOMETERS	0	0	0	1	1
Q654	INTERPRET AND RECORD DATA FROM FIXED FREQUENCY RADIOMETERS	0	0	0	1	1
Q659	PERFORM BURST PATROLS IN AUTOMATIC MODE	0	0	0	1	1
Q660	PERFORM BURST PATROLS IN SEMI AUTOMATIC MODE	0	0	0	1	1
Q661	PERFORM CALIBRATION CHECKS (CALCHECKS)	1	1	0	1	2
Q666	PERFORM INTERGRADED SOLAR RADIO FLUX (IFLUX) PROCEDURES	0	0	0	1	1
Q668	PERFORM RADIO LINEARITY PROCEDURES	0	0	0	1	1
Q673	POSITION RADIO ANTENNAS	0	0	0	1	1
Q701	STOW SOLAR RADIO ANTENNAS	0	0	0	1	1

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM		PERCENT MEMBERS PERFORMING				
		X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
21c. OPERATE GEOPHYSICAL OBSERVING EQUIPMENT (RIOMETER VLF RADIO RECEIVER, POLARIMETER, ISOMOSPHERE SOUNDER, MAGNETOMETER) AND IDENTIFY/ ANALYZE SIGNIFICANT FEATURES/EVENTS FROM EQUIPMENT READOUTS						
G257	REPLACE POLARIMETER RECORDER CHARTS	1	2	0	1	0
I322	COMPUTE POLARIMETER VALUES	1	2	1	1	0
Q636	ANALYZE RADIO BURST SPECTRUM DATA	0	0	1	1	3
Q637	ANALYZE RADIO FREQUENCY INTERFERENCES (RFIs)	0	0	0	1	2
Q641	CALCULATE ASTRONOMICAL UNIT CORRECTION FACTORS	0	0	0	1	1
Q642	CALCULATE ATMOSPHERIC ATTENUATIONS	0	0	0	0	0
Q643	CALCULATE SOLAR FLUX UNITS	0	0	0	1	1
Q646	CALIBRATE POLARIMETER RECORDING INSTRUMENTS	0	1	0	0	0
Q656	INTREPRET INSTRUMENT CALIBRATION DATA PRINTOUTS	0	0	0	1	1
Q661	PERFORM CALIBRATION CHECKS (CALCHECKS)	1	1	0	1	2
21d(1). PERFORM ANALYSIS AND EVALUATION OF SOLAR ACTIVITY AND GEOPHYSICAL EFFECTS						
J387	PLOT SUNSPOT REGIONS	0	1	0	1	1
Q634	ANALYZE GEOMAGNETIC DATA	0	0	1	1	2
Q664	PERFORM H ALPHA ANALYSIS	0	0	0	1	2
Q667	PERFORM OPTICAL END-OF-DAY TELESCOPE SHUTDOWNS	0	0	0	1	1
21d(2). PERFORM ANALYSIS AND EVALUATION OF GLOBAL STRUCTURE OF THE IONOSPHERE AND MAGNETISPHERE						
Q633	ANALYZE AURORAL FILMS	0	0	0	0	0
Q635	ANALYZE IONOSPHERIC DATA	0	1	1	1	2
Q678	PREPARE GEOMAGNETIC DISTURBANCE EVENT WARNING REPORTS	0	0	0	1	1

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM	PERCENT MEMBERS PERFORMING				
	X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
21d(3). PROVIDE FORECASTS AND TAILORED SPACE ENVIRONMENTAL SUPPORT TO USERS					
Q675 PREPARE ELECTRON DENSITY PROFILE PREDICTIONS	0	0	0	0	0
Q676 PREPARE EXTENDED PERIOD FORECASTS	0	0	0	1	1
Q679 PREPARE MAXIMUM USABLE FREQUENCY (MUF) PREDICTIONS	0	0	0	1	1
Q680 PREPARE MYSTIC STAR PREDICTIONS	0	0	0	1	1
Q683 PREPARE PRIMARY HF RADIO PROPAGATION FORECASTS	0	0	0	1	1
Q686 PREPARE SECONDARY HF RADIO PROPAGATION FORECASTS	0	0	0	1	1
Q690 PREPARE TOTAL ELECTRON CONTENT (TELCO) FORECASTS	0	0	0	0	0
Q694 PREPARE 45-DAY AP/F10 FORECASTS	0	0	0	1	1
Q695 PREPARE 7-DAY AP FORECASTS	0	0	0	1	1
Q696 PREPARE 7-DAY OUTLOOK FORECASTS	0	0	0	1	1
Q699 REPORT RFIs	1	1	0	1	1
21d(4). PERFORM AFGWC ASTROGEOPHYSICAL DATA BASE MAINTENANCE					
Q650 EDIT ASTROGEOPHYSICAL DATA BASES	0	1	1	1	2
Q651 EDIT SOLAR GEOPHYSICAL ACTIVITY SUMMARIES	0	1	1	1	2
Q652 EDIT SOLAR REGION SUMMARIES	0	1	1	1	2
Q658 MONITOR ASTROGEOPHYSICAL DATA BASES	0	1	1	1	2
21e. ENCODE AND RECORD SPACE ENVIRONMENTAL DATA					
Q638 ANNOTATE DAILY ACTIVITIES LOG FORMS	1	1	1	1	2
Q639 ANNOTATE SOLAR ANALYSIS CHART FORMS	0	0	0	1	1
Q653 ENCODE TOTAL ELECTRON COUNT (TEC) DATA ON COMPUTER WORKSHEETS	0	1	1	1	0
Q654 INTERPRET AND RECORD DATA FROM FIXED FREQUENCY RADIOMETERS	0	0	0	1	1
Q655 INTERPRET AND RECORD DATA FROM SFIRs	0	0	0	1	1

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM		PERCENT MEMBERS PERFORMING				
		X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
Q674	POST SOLAR PHOTOGRAPHS	0	0	0	1	1
Q681	PREPARE NONLINEARITY CORRECTION GRAPHS	0	0	0	0	0
Q682	PREPARE POLAR CAP ABSORPTION (PCA) EVENT WARNING REPORTS	0	0	0	1	1
Q684	PREPARE PROTON EVENT WARNING REPORTS	0	0	0	1	1
Q685	PREPARE RADIO BURST EVENT WARNING REPORTS	0	0	0	1	1
Q687	PREPARE SHORT WAVE (SW) FADE EVENT WARNING REPORTS	0	0	0	0	1
Q691	PREPARE USAF/NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMIN (NOAA) PRIMARY SOLAR AND GEOGRAPHICAL REPORTS	0	0	0	1	1
Q692	PREPARE X-RAY EVENT WARNING REPORTS	0	0	0	1	1
Q693	PREPARE 3-HOUR GEOMAGNETIC (GEMAG) INDEXES	0	0	1	1	1
Q700	SET UP SOLAR SEQUENCE TABLES	0	0	0	1	1
22b(1)(a). ALPHANUMERIC						
U834	ACKNOWLEDGE ALARMS OR ALERTS ON AWDS WORKSTATIONS	17	16	15	14	14
U859	PERFORM AWDS STARTUP OR SHUTDOWN PROCEDURES	15	14	14	12	12
22b(1)(b). GRAPHIC						
U834	ACKNOWLEDGE ALARMS OR ALERTS ON AWDS WORKSTATIONS	17	16	15	14	14
U859	PERFORM AWDS STARTUP OR SHUTDOWN PROCEDURES	15	14	14	12	12
22b(2). INPUT ALPHANUMERIC WEATHER DATA						
U855	INPUT AWDS ALPHANUMERIC WEATHER DATA	11	11	13	11	11

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM	PERCENT MEMBERS PERFORMING				
	X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
22b(3)(a). DISPLAY PRODUCTS					
U850 DECODE PRODUCT IDENTIFICATIONS (PIDs)	3	3	4	8	10
U851 DISPLAY AWDS PRODUCTS	13	13	14	14	14
22b(3)(b)1. PLOT MODELS					
U847 CREATE OR MODIFY AWDS PLOT MODELS	2	3	4	8	9
22b(3)(b)2. HORIZONTAL PRODUCTS					
U835 ANALYZE AWDS LOCALLY GENERATED GRIDS (LGGs)	2	2	3	12	11
U839 CREATE AWDS LGGs	3	3	4	8	10
U853 GENERATE AWDS HORIZONTAL PRODUCTS	10	11	12	14	13
22b(3)(b)3. VERTICAL PRODUCTS					
U836 ANALYZE AWDS VERTICAL CROSS-SECTION PRODUCTS	2	1	3	11	11
U854 GENERATE AWDS VERTICAL PRODUCTS	10	11	12	13	13
22b(3)(c). EDIT GRAPHIC PRODUCTS					
U852 EDIT AWDS PRODUCTS	11	11	11	14	13

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM	PERCENT MEMBERS PERFORMING				
	XO 1ST JOB	XO 1ST ENL	25150	25150A	25170A
22b(3)(d). STORE LOCALLY CREATED/MODIFIED PRODUCTS					
U866 STORE LOCALLY CREATED OR MODIFIED AWDS PRODUCTS	8	9	10	10	12
22b(3)(e)1. CREATE PRODUCT LOOPS/SEQUENCES					
U849 CREATE, UPDATE, OR DISPLAY AWDS PRODUCT LOOP SEQUENCES	12	11	13	12	12
22b(3)(e)2. EDIT PRODUCT LOOPS/SEQUENCES					
U849 CREATE, UPDATE, OR DISPLAY AWDS PRODUCT LOOP SEQUENCES	12	11	13	12	12
22b(3)(f)1. CREATE COMMAND SEQUENCES					
U844 CREATE OR EDIT AWDS COMMAND SEQUENCES	8	8	10	9	11
22b(3)(f)2. EDIT COMMAND SEQUENCES					
U844 CREATE OR EDIT AWDS COMMAND SEQUENCES	8	8	10	9	11
22b(3)(f)2. EDIT COMMAND SEQUENCES					
U844 CREATE OR EDIT AWDS COMMAND SEQUENCES	8	8	10	9	11

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM	PERCENT MEMBERS PERFORMING				
	X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
22b(4)(a). CREATE LOCAL FORMS					
U843 CREATE LOCAL FORMS USING AWDSs	3	4	6	5	5
22b(4)(b). DELECT PRODUCTS FOR QUALITY CONTROL					
U858 PERFORM AWDS QUALITY CONTROL PROCEDURES	5	6	9	8	8
22b(4)(c). DISPLAY MONTHLY SUMMARY AND STATION STATISTICS					
U851 DISPLAY AWDS PRODUCTS	13	13	14	14	14
22b(5). PERFORM OPERATOR MAINTENANCE					
G250 REPLACE INK TRANSFER ROLLS ON AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) GRAPHICS PRINTERS	9	8	7	9	8
U868 TROUBLESHOOT AWDS DEFICIENCIES OR OUTAGES	5	6	7	10	11
22c(1). PERFORM RMSM FUNCTIONS					
U837 ASSEMBLE AIRCRAFT ACCIDENT INVESTIGATION (AAI) WEATHER DATA USING AWDSs	4	3	3	7	8
U841 CREATE DATA STORAGE TAPES USING AAI FUNCTIONS	2	2	2	4	6
U842 CREATE DATA STORAGE TAPES WITHOUT USING AAI FUNCTIONS	0	0	0	2	6
U846 CREATE OR MODIFY AWDS CHECKPOINT TAPES	0	0	1	3	6
U856 LOAD CHECKPOINT TAPES	0	0	1	4	6

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM	PERCENT MEMBERS PERFORMING				
	X0 1ST JOB	X0 1ST ENL	25150	25150A	25170A
22c(2). MODIFY SYSTEM TABLES FOR OPTIMUM SYSTEM CONFIGURATION					
U840 CREATE AWDS METWATCH ALARMS	0	0	2	4	7
U848 CREATE OR MODIFY AWDS TABLES, SUCH AS EXTERNAL PRODUCTS RETENTION TABLES OR STATION SELECT SURFACE TABLES	0	0	1	4	7
22c(3). MODIFY PLOT MODELS					
U847 CREATE OR MODIFY AWDS PLOT MODELS	2	3	4	8	9
22c(4). ACCOMPLISH ASM UNIQUE FUNCTIONS					
U838 ASSIGN FUNCTION KEYS ON AWDS WORK STATIONS	9	9	11	9	9
U845 CREATE OR MAINTAIN CONTINUITY LOGS	2	1	2	5	5
U857 MONITOR RECEIPT OF AWDS WEATHER DATA	12	11	13	12	12
U862 REBOOT AWDS PROGRAMS	10	11	11	10	12
U863 RESTART AWDS WORK STATIONS FROM COMMUNICATIONS/DATA MONITORS (C/DMS)	10	10	11	13	13
U864 ROUTE AWDS PRODUCTS TO FUNCTIONAL AREAS, OTHER THAN RMSM	10	8	9	11	10
22c(5). NON-WEATHER FUNCTIONAL AREAS					
U867 TRAIN NON-WEATHER PERSONNEL ON AWDS EQUIPMENT	1	1	2	5	7

TABLE B2

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

OBJECTIVE	TNG EMPH*	PERCENT MEMBERS PERFORMING X0 1ST JOB	X0 1ST ENL	TASK DIFF	ATI
I4g. DECODE AND PLOT LAND/SHIP SYNOPTIC OBSERVATIONS					
J378 PLOT NAVAL OCEANOGRAPHIC DATA	1.95	3	3	5.46	7
J388 PLOT SYNOPTIC CODES	5.22	22	24	5.44	11
I4i. DECODE AND PLOT 3 RADAR REPORTS (RAREPs)					
J383 PLOT RAREPs	4.60	19	22	4.71	11
I4i. DECODE AND PLOT 3 DIGITAL RADAR REPORTS					
J383 PLOT RAREPs	4.60	19	22	4.71	11
I4k. PERFORM AN UPPER AIR ANALYSIS					
L442 ANALYZE CONTINUITY DATA	.79	0	1	4.86	2
L447 ANALYZE MOISTURE CHARTS	1.33	1	2	5.07	2
L451 ANALYZE RADIOSONDE OBSERVATIONS (RAOBs)	.91	2	3	5.57	2
L452 ANALYZE RADIOWIND OBSERVATIONS	.47	0	0	5.52	2
L464 ANALYZE UPPER AIR CHARTS	1.97	6	7	5.67	7
L465 ANALYZE UPPER LEVEL WINDS	1.36	2	3	5.52	2
L466 ANALYZE VORTICITY CHARTS	1.67	2	3	5.66	7

* Observer TE Mean = 1.50 S.D. = 1.70

TABLE B1 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

LINE ITEM	PERCENT MEMBERS PERFORMING				
	XO 1ST JOB	XO 1ST ENL	25150	25150A	25170A
22c(2). MODIFY SYSTEM TABLES FOR OPTIMUM SYSTEM CONFIGURATION					
U840 CREATE AWDS METWATCH ALARMS	0	0	2	4	7
U848 CREATE OR MODIFY AWDS TABLES, SUCH AS EXTERNAL PRODUCTS RETENTION TABLES OR STATION SELECT SURFACE TABLES	0	0	1	4	7
22c(3). MODIFY PLOT MODELS					
U847 CREATE OR MODIFY AWDS PLOT MODELS	2	3	4	8	9
22c(4). ACCOMPLISH ASM UNIQUE FUNCTIONS					
U838 ASSIGN FUNCTION KEYS ON AWDS WORK STATIONS	9	9	11	9	9
U845 CREATE OR MAINTAIN CONTINUITY LOGS	2	1	2	5	5
U857 MONITOR RECEIPT OF AWDS WEATHER DATA	12	11	13	12	12
U862 REBOOT AWDS PROGRAMS	10	11	11	10	12
U863 RESTART AWDS WORK STATIONS FROM COMMUNICATIONS/DATA MONITORS (C/DMS)	10	10	11	13	13
U864 ROUTE AWDS PRODUCTS TO FUNCTIONAL AREAS, OTHER THAN RMSM	10	8	9	11	10
22c(5). NON-WEATHER FUNCTIONAL AREAS					
U867 TRAIN NON-WEATHER PERSONNEL ON AWDS EQUIPMENT	1	1	2	5	7

TABLE B2 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

OBJECTIVE	TNG EMPH*	PERCENT MEMBERS PERFORMING X0 1ST JOB	X0 1ST ENL	TASK DIFF	ATI
I41. PERFORM A SURFACE ANALYSIS					
L440 ANALYZE CLOUD COVER CHARTS	1.14	1	2	4.90	2
L442 ANALYZE CONTINUITY DATA	.79	0	1	4.86	2
L445 ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	1.38	0	1	4.86	2
L447 ANALYZE MOISTURE CHARTS	1.33	1	2	5.07	2
L459 ANALYZE SYNOPTIC SURFACE CHARTS	2.00	1	1	5.87	7
L468 INITIALIZE NUMERICAL WEATHER PRODUCTS (NWPs)	1.38	0	0	5.52	2
I8f. START-UP AND SHUTDOWN AN AWDS ALPHANUMERIC FUNCTIONAL AREA					
U834 ACKNOWLEDGE ALARMS OR ALERTS ON AWDS WORK STATIONS	2.98	17	16	3.14	7
U859 PERFORM AWDS STARTUP OR SHUTDOWN PROCEDURES	2.90	15	14	5.35	7
I8g. INPUT ALPHANUMERIC WEATHER DATA					
U855 INPUT AWDS ALPHANUMERIC WEATHER DATA	2.55	11	11	5.17	7
I8h. DISPLAY AWDS PRODUCTS					
U850 DECODE PRODUCT IDENTIFICATIONS (PIDs)	1.69	3	3	5.66	7
U851 DISPLAY AWDS PRODUCTS	3.05	13	13	4.13	7

* Observer TE Mean = 1.50 S.D. = 1.70

TABLE B2 (CONTINUED)

AFSC 251X0 STS ELEMENTS REQUIRING REVIEW
(Less Than 20 Percent Members Performing)

OBJECTIVE	TNG EMPH*	PERCENT MEMBERS PERFORMING X0 1ST JOB	X0 1ST ENL	TASK DIFF	ATI
I8i. GENERATE AWDS HORIZONTAL PRODUCTS					
U835 ANALYZE AWDS LOCALLY GENERATED GRIDS (LGGs)	.59	2	2	5.46	2
U839 CREATE AWDS LGGs	.86	3	3	6.08	2
U853 GENERATE AWDS HORIZONTAL PRODUCTS	2.19	10	11	4.69	7
I8j. GENERATE AWDS VERTICAL PRODUCTS					
U836 ANALYZE AWDS VERTICAL CROSS-SECTION PRODUCTS	.60	2	1	5.57	2
U854 GENERATE AWDS VERTICAL PRODUCTS	2.10	10	11	5.35	7
I8k. EDIT AWDS PRODUCTS					
U852 EDIT AWDS PRODUCTS	2.57	11	11	5.25	7
I8l. CREATE AND EDIT A LOOP SEQUENCE					
U849 CREATE, UPDATE, OR DISPLAY AWDS PRODUCT LOOP SEQUENCES	1.86	12	11	4.56	7
I8m. STORE LOCALLY CREATED/MODIFIED AWDS PRODUCTS					
U866 STORE LOCALLY CREATED OR MODIFIED AWDS PRODUCTS	1.95	8	9	4.77	7

* Observer TE Mean = 1.50 S.D. = 1.70